

**US EPA  
Office of Air and Radiation**

**Final National Program and Grant Guidance**

**for**

**Fiscal Years 2005-2007**

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## **Introduction and Executive Summary**

This document identifies national air and radiation priorities and milestones for fiscal years 2005, 2006, and 2007, with an emphasis on fiscal year 2005. Also included is additional information on the use and prospective allocation of FY 2005 state, local, and tribal assistance grants (Appendices A and B).

### **Summary of Key National Priorities**

OAR's national program priorities for the FY 2005-2007 time-frame are straightforward and build upon the priorities in the Administrator's 500-Day Plan. Continued progress in implementing the priorities will bring us significantly closer to healthier air and will create a more effective regulatory system. These priorities, which are below, in no way reflect the full range of OAR's work. For example, our efforts to improve indoor air quality; further the Homeland Security effort; encourage the development of new, lower-polluting technologies; and reduce greenhouse gas emissions are critical to the Agency's mission.

Our review of the Regional Strategic Plans found the air and radiation priorities they identified to be largely consistent with national air and radiation program priorities, and we are confident that the strategies and approaches the Regions plan to implement will contribute appropriately to achieving the results under in Goal 1 of the EPA Strategic Plan. In developing our *FY 2005-2007 National Program and Grant Guidance*, we carefully considered the Regional Plans to ensure that our guidance would not impose requirements that would unduly limit the Regions' flexibility to address their priorities and implement their strategies. As a result, the Regional Plans and OAR national guidance complement one another and are in alignment, and therefore should help to facilitate the negotiation of grant workplans and performance agreements between regions and states. We did identify a number of noteworthy regional strategies and have included them in Appendix C.

### ***National Priority: Reduce Health Risks through a Suite of Actions***

A top priority is completing and implementing the Clean Air Rules of 2004 – a suite of four actions that address fine particles (PM<sub>2.5</sub>), ozone, mercury, and diesel emissions that will dramatically improve America's air quality and reduce the health risks. The Clean Air Rules of 2004 encompass the following major rules:

Clean Air Ozone Rules: On April 15, 2004, EPA designated part or all of 474 counties nationwide as nonattainment for either failing to meet the 8-hour ozone National Ambient Air Quality Standard (NAAQS) or for causing a downwind county to fail. At the same time, we issued a new rule classifying areas by the severity of their ozone conditions and establishing the deadlines state, tribal, and local governments must meet to reduce ozone levels. These deadlines range from 2007 to 2013. Once designations and classifications take effect on June 15, 2004, states, tribes, and communities must prepare a plan to reduce ground-level ozone. We will be working with them to develop innovative approaches to achieve cleaner, healthier air while sustaining economic growth.

Clean Air Fine Particle Rules: In February 2004, states and tribes recommended to EPA areas to be designated as nonattainment for PM<sub>2.5</sub>. We will review these recommendations and respond to the states and tribes during the summer of 2004. By December 31, 2004, we will finalize the designations for the PM<sub>2.5</sub> standards. Once nonattainment designations take effect, state and local governments have three years to develop implementation plans designed to meet the standards by reducing air pollutant emissions contributing to fine particle concentrations.

Clean Air Interstate Rule: In the January 30, 2004 Federal Register, EPA proposed the Interstate Air Quality Rule which focuses on states whose sulfur dioxide (SO<sub>2</sub>) and nitrogen oxide (NO<sub>x</sub>) emissions are significantly contributing to fine particle and ozone pollution problems in downwind states. Our priority is to promulgate the rule in 2004. Alternately, if Clear Skies legislation is enacted by Congress, our focus will be on developing the implementing regulations, infrastructure, and tools necessary to implement the legislation.

Clean Air Mercury Rule: In the January 30, 2004 Federal Register, EPA proposed the Utility Mercury Reductions Rule for controlling mercury emissions from power plants. On February 23, 2004, EPA signed a supplemental proposal addressing areas not covered in the January 30 Federal Register notice. Our priority is to promulgate the rule in 2004 and develop the implementing regulations, infrastructure, and tools.

Clean Air Nonroad Diesel Rule: In 2003, EPA introduced a proposal to reduce emissions from the nonroad sector. This proposal uses the same approach as the heavy-duty on-road diesel rule, including both fuel and engine emissions standards. Our priorities are to finalize the Clean Air Nonroad Rule and implement the onroad heavy-duty diesel rule already promulgated. While these diesel standards will reduce pollution from new vehicles and equipment, they do not require reductions from existing diesel engines. Given the long life span and high level of emissions from existing diesel engines, significant air quality benefits are possible by reducing these emissions. Therefore, another priority is to work with state, tribal, and local governments and our industry partners on creative, voluntary programs to reduce emissions from existing engines, such as the Clean School Bus USA program, which would assist school districts across the country in replacing or retrofitting school buses.

### ***National Priority: Implement the Risk-based Air Toxics Program***

In February 2004, we completed the 10-year Maximum Achievable Control Technology (MACT) standards. With these rules, EPA has issued 96 MACT standards to reduce toxic emissions from over 160 categories of industrial sources. And, as mentioned above, in January 2004 we proposed the Clean Air Mercury Rule for controlling mercury emissions from power plants. Our next tasks in the toxics program include promulgating area source and residual risk standards; developing tools to assess baseline risks and risk reduction scenarios; implementing national, regional, and community-based initiatives that focus on multi-media and cumulative (including indoor-outdoor) risks; and providing public education and outreach. We need to build on the successes of community-based efforts such as the Cleveland Air Toxics Project to identify and achieve additional reductions that matter most at the local level.

### ***National Priority: Improve Existing Regulatory Programs***

The Clean Air Act's reputation as one of the most complex laws on the books today is well deserved. In many ways, the nature of air pollution control necessitates this complexity. However, our experience implementing the CAA has revealed the need to use market-based and non-regulatory means, and to make our existing regulatory programs work better. The recent changes to the New Source Review program are one example of the type of changes we can make. We are working to make similar improvements in other regulatory programs.

### ***National Priority: Work with Partners***

We also will work collaboratively with states, tribes, and local programs to develop the additional local measures necessary in areas with the worst air quality. We will encourage states, tribes, and local programs to adopt measures that achieve early reductions in emissions to provide public health benefits sooner.

### ***National Priority: Focus on Title V Priorities***

At this point, we are well over a decade into the Title V operating permit program. Although behind schedule, state and local agencies have issued almost 90% of the permits. The pollution sources that remain to be permitted are among the largest and most complex.

### ***National Priority: Carry out Non-Regulatory Programs***

Another lesson we've learned over the past several years is the importance of non-regulatory approaches. For example, the diesel retrofit program has made it possible to achieve reductions from the diesel trucks and buses before our regulations are implemented. The Clean School Bus USA program, a multi-million dollar initiative, will reduce both children's exposure to diesel exhaust and the amount of air pollution created by diesel school buses. The joint EPA-DOT Best Work Places for Commuters program will continue to help clean air areas stay in attainment and rewards companies for being good stewards of the environment. Energy Star will continue to help consumers to choose products that save money and improve the environment and encourage companies to produce these products, and Climate Leaders will continue working with corporate partners to set a corporate-wide greenhouse gas reduction goals and conduct regular inventories of their emissions. We will be working to grow these programs as we test out similar approaches in other areas.

## **Organization of the Chapters**

The program guidance is organized into five chapters – each corresponding to an Objective under Goal 1 of the *2003-2008 EPA Strategic Plan* (i.e., Outdoor Air, Indoor Air, Stratospheric Ozone, Radiation Protection, Climate Change).

Each chapter begins by replicating, from the *Strategic Plan*, the objective, sub-objective, and strategic target statements associated with the particular objective, to inform the reader of the longer-term outcomes and results being pursued and provide context for the ensuing discussion

of strategies, milestones, and priorities. Immediately following that is an overview discussion of the strategy and associated programs for achieving the objective.

The substance of each chapter is contained in subsections which address specific aspects of how particular programs are implemented. In the case of Outdoor Air, the subsections reflect the different roles and responsibilities of the partners/co-regulators. For instance, there are subsections that speak to the federal role (EPA HQ and Regions) and there are subsections that speak to the roles of state, local, and tribal air quality management agencies. In the other chapters/objectives, the subsections are based on the type of activity rather than who performs the activity. For example, the Stratospheric Ozone chapter is subdivided into domestic vs. international activities, whereas the Indoor Air chapter is subdivided into based on how activities are targeted: asthma, schools and workplaces, environmental smoke, or radon.

### **State and Tribal Assistance Grants**

EPA's state, local, and tribal partners carry out a crucial role in the national effort to achieve and maintain clean, healthy outdoor and indoor air. Grant resources are key to this effort. Appendix A contains additional national guidance and Region-by-Region allocations for state and local air and state indoor radon grant programs. A tribal air allocation will be provided at a later date. Appendix A provides more information on specific grant topics including new initiatives, areas of changing emphasis, and associated program support. Appendix B provides additional information on the FY 2005 national air toxics monitoring program.

### **Commitments and Reporting Requirements Table**

Attachment D contains the items for which OAR is asking Regions to make commitments. As currently designed, each commitment is either quantifiable and measurable (i.e., Region inserts a number), or the commitment is text that indicates that the Region agrees to conduct the stated activities or agrees to report the stated information (Region types in OK, agree, or will do). OAR has provided Appendix D to OCFO for their use in developing the "on-line commitment system."

## Objective 1.1 - Healthier Outdoor Air

Objective 1.1: Healthier Outdoor Air. Through 2010, working with partners, protect human health and the environment by attaining and maintaining health-based air-quality standards and reducing the risk from toxic air pollutants.

Sub-objective 1.1.1: More People Breathing Cleaner Air. By 2010, working with partners, improve air quality to healthy levels for 39 percent of the people who live in areas where the air does not meet new national standards for fine particles in 2001 and for 60 percent who live in areas not meeting new national standards for 8-hour ozone in 2001. While some areas may not reach attainment of these new standards because of air pollutant concentrations that sometimes exceed the allowable levels, air quality will improve for an additional 27 percent of the people who live in areas not meeting new standards for 8-hour ozone in 2001. Maintain attainment status for the 123.7 million people who had healthy air for the criteria pollutants in 2001.

Strategic Targets:

- By 2010, reduce stationary source emissions of sulfur dioxide by 6.7 million tons from the 2000 level of 11.2 million tons, and by 2008, reduce stationary source emissions of nitrogen oxides by 3 million tons from the 2000 level of 5.1 million tons.
- By 2010, reduce mobile source emissions of nitrogen oxides by 3.4 million tons from the 2000 level of 11.8 million tons; volatile organic compounds by 1.7 million tons from the 2000 level of 7.7 million tons; and fine particles by 122,400 tons from the 2000 level of 510,550 tons.

Sub-objective 1.1.2: Reduced Risk from Toxic Air Pollutants. By 2010, working with partners, reduce air toxics emissions and implement area-specific approaches to reduce the risk to public health and the environment from toxic air pollutants.

Strategic Targets:

- By 2007, through maximum achievable control technology (MACT) standards, reduce air toxics emissions from major stationary sources by 1.7 million tons from the 1993 level of 2.7 million tons.
- By 2010, through the President's Clear Skies legislation, reduce mercury emissions from electric generating units by 22 tons from the 2000 level of 48 tons.
- By 2010, through federal standards, reduce air toxics emissions from mobile sources by 1.1 million tons from the 1996 level of 2.7 million tons.
- By 2010, all of the 260,000 diesel school buses manufactured between model years 1991 and 2000 will be retrofitted either with better emission controls or to use cleaner fuels, and all 130,000 buses manufactured before 1991 but still in use in 2003 will be replaced.

EPA's strategy for achieving these goals combines national and local measures, reflecting different federal, state, tribal, and local government roles. We have found that problems with broad national impact – such as emissions from powerplants and other large sources and pollution from motor vehicles and fuels – are best handled primarily at the federal level. States, tribes, and local agencies can best address the regional and local problems that remain after federal measures have been fully applied.

EPA, states, and local agencies work together to meet clean air goals cost-effectively by employing various regulatory, market-based, and voluntary approaches and programs. States are primarily responsible for improving air quality and meeting the NAAQS. States first develop emission inventories, operate and maintain air monitoring networks, and perform air quality modeling. They then develop state implementation plans (SIPs) that lay out the mobile and

stationary source control strategies they will employ to improve air quality and meet the NAAQS.

EPA assists states by providing technical guidance and financial assistance, issuing regulations, and implementing programs designed to reduce pollution from the most widespread and significant sources of air pollution: mobile sources, such as cars, trucks, buses, and construction equipment; and stationary sources, such as power plants, oil refineries, chemical plants, and dry cleaning operations. Interstate transport of pollutants – a problem no state can solve on its own – makes a major contribution to air pollution problems in the eastern U.S. To address this issue, EPA requires control of upwind sources that contribute to downwind problems in other states.

EPA has a trust responsibility to protect air quality in Indian country, but authorized tribes may choose to develop and implement their own air quality programs. EPA and tribes are working to increase the currently limited information on air quality on tribal lands, build tribal capacity to administer air programs in Indian country, and establish EPA and state mechanisms to work effectively with tribal governments on regulatory development and regional and national policy issues.

To further reduce exposure to air toxics, EPA will develop and issue federal standards for major stationary sources which, when implemented through state programs, will reduce toxic emissions by 1.7 million tons. In addition, we will conduct national, regional, and community-based efforts to reduce multi-media and cumulative risks. Characterizing emissions and the risks they pose on national and local scales, such as in Indian country, will require significant effort. We will need to update the science and to keep the public informed about these issues.

We will develop and refine tools, training, handbooks, and information to assist our partners in characterizing risks from air toxics, and we will work with them on strategies for making local decisions to reduce those risks. We are working with state, tribal, and local agencies to design a national toxics monitoring network, and will compile and analyze information from local assessments to better characterize risk and assess priorities.

Our strategies for achieving healthier outdoor air are implemented through the following seven programs:

- Clean Air Allowance Trading Programs
- Federal Vehicle and Fuels Standards and Certifications
- Federal Stationary Source Regulations
- Federal Support for Air Quality Management
- Federal Support for Air Toxics Management
- State and Local Air Quality Management
- Tribal Air Quality Management

The first five programs are federally-implemented programs and the latter two are grant programs that support state, tribal, and local air program implementation. These programs and their priorities for FY 2005-2007 are described below.



## **CLEAN AIR ALLOWANCE TRADING PROGRAMS**

This program includes development, implementation, and evaluation of federally-administered programs for the trading of emissions allowances. The trading programs help implement the NAAQS and reduce acid deposition, toxics deposition, and regional haze. Pollutants include SO<sub>2</sub> and NO<sub>x</sub>. Current programs include the Acid Rain Program authorized under title IV of the 1990 Clean Air Act (CAA) Amendments and the NO<sub>x</sub> Budget trading program, which was initially established under a Memorandum of Understanding among nine states and D.C. in the Northeast Ozone Transport Region (OTR). The NO<sub>x</sub> Budget trading program has expanded under CAA Section 126 and Phase I of the NO<sub>x</sub> SIP call to double the number of affected sources and 11 states from the Midwest and Southeast. Phase II of the NO<sub>x</sub> SIP call will add two additional states and more sources. EPA also plans to establish allowance trading programs in the future either under the proposed Clean Air Interstate Rule or Clear Skies legislation. In addition, EPA has included a cap and trade option under the proposed Clean Air Mercury Rule to cut mercury emissions from power plants nationwide.

Our strategy for using allowance trading programs to promote more cost-effective pollution control and achievement of environmental objectives includes three components:

- ☐ New Statutory Authority: Establish a comprehensive, multi-pollutant approach with President Bush's Clear Skies Initiative as a key element. Using a cap and trade approach modeled after the Acid Rain Program, Clear Skies would create a mandatory program that would reduce power plant emissions of three of the worst air pollutants – SO<sub>2</sub>, NO<sub>x</sub>, and mercury.
- ☐ Clean Air Interstate Rule: Reduce SO<sub>2</sub> and NO<sub>x</sub> power plant emissions by promulgating a federal rule. Clear Skies is the most effective way to reduce emissions, but pending enactment of this new authority, a federal rule similar to the NO<sub>x</sub> SIP call is the single most important step we can take to improve air quality in the U.S.
- ☐ Existing Programs: Implement existing allowance trading programs while the Clear Skies legislation moves forward and work on the Clean Air Interstate Rule.

**Status:** The Clean Air Interstate Rule was proposed on January 30, 2004 (proposed as the Interstate Air Quality Rule), as was the Clean Air Mercury Rule (proposed as the Utility Mercury Reductions Rule). EPA is coordinating these rulemakings to allow the emission reductions to be achieved in the most cost-effective manner by sources affected by both actions.

States in the OTR began implementation of the NO<sub>x</sub> SIP call (in place of Phase III of their program) in 2003. Most states in the expanded region that are contributing to regional transport of ozone have elected to join the centralized multi-state NO<sub>x</sub> Budget trading program, administered by EPA; 10 states began monitoring and reporting emissions data in 2003. (The remaining state affected under Phase I of the NO<sub>x</sub> SIP call will begin participating in 2004.) In 2004, the initial compliance season for the NO<sub>x</sub> SIP call, over 2,500 units in 20 states and D.C. will be reporting data to the Acid Rain Program's Emissions Tracking System, for end-of-season reconciliation against allowances held in their accounts. In 2006, more units in up to two

additional states will begin monitoring so they can participate in the trading program under Phase II of the NO<sub>x</sub> SIP call.

**FY 2005-2007 Milestones and Priorities: NO<sub>x</sub> Budget Trading Program**

- 2005: In collaboration with the participating states, EPA publishes progress report on emission reductions, allowance activity, ozone trends, and other environmental results for the initial (2004) compliance season of the expanded program (20 states and D.C.) under Phase I of the NO<sub>x</sub> SIP call.
- 2005: Working closely with the states, EPA establishes allowance accounts for units affected under Phase II of the NO<sub>x</sub> SIP call.
- ☐ 2005: Regions participate with EPA HQ to provide orientation to states and industry on monitoring, allowance trading education, emission reporting, source applicability, etc.
- 2005-2007: EPA develops program operating software and guidance for incorporating Phase II into the NO<sub>x</sub> SIP call and trading program and improving public and state access to the trading data. States develop SIP revisions and propose and finalize rules for implementation.
- 2006: In collaboration with the states, EPA publishes progress report on the NO<sub>x</sub> Budget trading program for the 2005 compliance season under the Phase I NO<sub>x</sub> SIP call. Analytical software becomes available on the web.
- ☐ 2006: Regions assist HQ with monitor certification for Phase II sources.
- ☐ 2006: Phase II sources begin monitoring and reporting emissions data to EPA
- ☐ 2007: Initial compliance season for Phase II affected states and sources.

**FY 2005-2007 Milestones and Priorities: Interstate Air Quality Program/Clear Skies**

- ☐ 2005: EPA either promulgates the Clean Air Interstate Rule or, if Clear Skies is enacted, develops implementing regulations.
- ☐ 2006-2007: Working with states and tribes, EPA establishes an integrated assessment program to include modernized deposition and ambient monitoring that is in-step with integrated national monitoring strategies involving core multi-pollutant sites. Under the President's Management Agenda and PART (Program Assessment Rating Tool) process, program accountability – measured in terms of environmental outcomes from defined baselines – has become an essential component for all programs. The existing deposition monitoring networks have been in operation for more than 25 years. They have provided invaluable measurements on long-term trends in acid deposition and ozone transport, but these networks are aging, expensive to maintain, and need to be modernized to ensure the continued availability of these direct environmental measures for program assessment. Additional sites are needed in the middle of the country to fill gaps in the CASTNet monitoring network.
- ☐ 2006-2007: EPA assists states and tribes in operating modernized and/or new sites in the integrated assessment program. Pre-implementation program baselines are developed.
- ☐ 2006-2007: Regions assist HQ in investigating monitoring alternatives, performance specifications, and protocols (particularly as they relate to mercury).
- ☐ Other milestones will be developed following rule promulgation or enactment of new multi-pollutant legislation.

### **FY 2005-2007 Milestones and Priorities: Acid Rain Program**

- 2005: EPA measures and reports on program performance using the new Acid Rain PART annual measures (% change in total annual average sulfur (nitrogen) deposition and mean ambient sulfate (nitrate) concentrations from 1990 monitored levels) in addition to SO<sub>2</sub> emissions reduced (tons/yr) from the 1980 baseline.
- 2005-2007: Working with states, tribes, and other partners in CASTNet, develop and implement an operations plan that will assure supportability over the next 5-10 years and will bring this network in-step with integrated national monitoring strategies involving core multi-pollutant sites measuring ambient concentrations on a continuous basis. EPA will streamline the process whereby states and tribes may use their Acid Rain Section 105 funds to establish and/or operate CASTNet sites in their jurisdictions.
- 2005-2007: Regions assist HQ in improving the efficiency of monitor certification and emissions reporting processes, especially for new sources.

### **FEDERAL STATIONARY SOURCE REGULATIONS**

This program includes implementation of MACT standards, and development of area source standards, residual risk standards, New Source Performance Standards, and associated national guidance and outreach information. For area sources, the strategy is to develop generally-available, control technology-based standards for the highest priority area source categories.

#### **Status**

EPA has finalized all MACT standards required by the CAA; there are now MACT standards for all major sources of hazardous air pollutants (HAPs). EPA is in the early stages of the Residual Risk program, with the first residual risk standard scheduled to be finalized in 2005. Risk assessments for 19 other industries are in various stages of completeness. Ultimately, risk assessments for over 150 industries will be prepared under the Residual Risk program. EPA has identified a total of 70 area source categories, which represent 90% of the emissions of the 30 air toxics that pose the greatest potential health threat in urban areas. Of these 70 area source categories, 14 categories are already regulated. The remaining area source standards are under development or will be developed in the future.

On January 30, 2004, EPA published the proposed Clean Air Mercury Rules to reduce mercury emissions from coal-fired units and nickel emissions from oil-fired units. Two basic alternatives were proposed – a traditional section 112 MACT approach and an alternative approach based on the use of section 111. The section 111 approach would set emission limits for mercury from new coal-fired sources and nickel from new oil-fired sources under section 111(b); guidelines for nickel from existing oil-fired sources under section 111(d); and cap-and-trade guidelines for mercury from existing coal-fired sources under section 111(d). EPA will complete a rule incorporating the selected alternative by December 15, 2004.

EPA contracted with the National Academy of Sciences (NAS) to analyze the air pollution issues associated with animal feeding operations (AFOs). Under the contract, NAS will review the scientific issues and make recommendations related to characterization of the swine, beef, dairy, and poultry AFO industries; measuring and estimating emissions; and analyzing potential best management practices, including costs and technological feasibility. The NAS findings

identified numerous deficiencies in EPA's methodologies and technical tools for estimating emissions for this industry. As a result of the NAS study, EPA is working with industry, the U.S. Department of Agriculture (USDA), academia, and non-governmental organizations to develop a two-year monitoring program to fill data gaps in the emission estimates. EPA, in partnership with USDA, is prioritizing a research agenda to ensure critical research is initiated immediately. Concurrent with the monitoring program, EPA is in the process of defining the applicable CAA requirements for AFOs. The Agency will prepare an announcement of its strategy and hold public meetings around the country. Following public comments, a proposed rule will be drafted.

#### **FY 2005 Milestones and Priorities**

- EPA completes Clean Air Mercury Rule.
- EPA continues development of "Defense Land Systems and Miscellaneous Equipment" MACT (Military MACT).
- EPA promulgates coke oven residual risk rule.
- EPA promulgates other solid waste incineration area source rule.
- EPA proposes strategy for addressing air emissions from animal feeding operations (AFO rule).
- Regions delegate and/or otherwise ensure implementation of 100% of applicable major and area source section 112(d), 111(d), and 129 standards.
- Regions help states implement MACT/BACT/GACT and/or section 112(d) standards.
- Regions implement MACT/BACT/GACT and/or section 112(d) standards where applicable in Indian Country.

#### **FY 2006 Milestones**

- EPA promulgates area source rule for oil and natural gas production.
- EPA promulgates AFO rule.
- EPA provides oversight on emission monitoring study associated with consent agreement on AFOs.

#### **FY 2007 Milestones**

- EPA promulgates area source rules for stationary internal combustion engines, hospital sterilizers, and gas distribution stage I.
- EPA promulgates additional area source standards and residual risk standards according to court ordered schedule.

### **FEDERAL VEHICLE AND FUELS STANDARDS AND CERTIFICATIONS**

This program includes federal activities for the development, implementation, and evaluation of regulatory, market-based, and voluntary programs to reduce pollutant emissions from mobile sources and fuels, as well as reduce vehicle travel. Types of mobile sources include: light-duty vehicles/engines (automobiles, light trucks, and sport utility vehicles), heavy-duty engines (buses and large trucks), non-road vehicles/engines (construction and farm equipment), and fuels (diesel and gasoline). The strategy for reducing emissions from mobile sources includes four elements. (The programs for clean transportation from alternatives and new technology are discussed under Objective 5.1 - Climate Change on page 37.

- Clean Vehicles: Implement and ensure compliance with more stringent emission standards for cars, buses, trucks, and nonroad engines, such as construction equipment, boats, lawn and garden equipment, and locomotives.
- Clean Fuels: Develop reformulated gasoline, diesel fuel, and non-petroleum alternatives.
- Clean Transportation Alternatives: Develop strategies to encourage transportation alternatives to address vehicle travel growth.
- New Technology: Partner with industry to develop and certify low emissions vehicles that use new technology (clean diesel, exhaust gas recirculation for diesel, new catalyst technology, fuel cell, hybrid-electric). Continue in-house assessment and development of clean engine and fuel technologies to meet our commitment of conducting technology reviews to evaluate progress toward implementation of new vehicle/engine standards.

**Status:** The light-duty vehicle program is phasing in the Tier2 standards. The in-use program is successfully finding and remedying in-use emission problems (over one million vehicles recalled annually). The heavy-duty program has implemented 50% more stringent standards early and will start the phase-in standards which will be 95% more stringent. The heavy-duty in-use screening program is now in-place and certification and in-use Federal Test Procedure (FTP) testing program is being developed for FY 2005. Toxics emission performance requirements for conventional gasoline and cleaner-burning reformulated gasoline were promulgated in 2000. EPA is re-evaluating the need for and feasibility of additional controls to reduce emissions of mobile source air toxics and plans to promulgate a rule in 2005.

#### **FY 2005 Milestones and Priorities**

- EPA promulgates final rule for in-use compliance program for highway heavy-duty engines and proposes similar program for nonroad diesel engines.
- ☐ EPA promulgates final rule to address emissions from small gasoline engines (<50 hp).
- ☐ EPA promulgates final rule establishing on-board diagnostic (OBD) requirements for engines used in highway heavy-duty trucks and begins development of similar OBD program for nonroad engines.
- ☐ EPA promulgates final rule addressing air toxics from mobile sources.
- ☐ EPA proposes rule to apply advanced after-treatment technologies to locomotives and commercial marine engines and require low sulfur in their fuels.
- Regions assist nonattainment areas in SIP preparation and implementation of federally-required control strategies such as vehicle inspection/maintenance (I/M) and state fuel programs, and provide technical support for implementation and unique modeling issues.

#### **FY 2005-2006 Milestones**

- Heavy-duty on-highway diesel engine manufacturers begin in use testing to ensure compliance with emission standards. EPA will receive about 2,000 in-use test results annually.
- EPA proposes rule to reduce emissions from large commercial ships.
- EPA implements mobile source air toxics rule and continues implementation of the reformulated gasoline (RFG) program, Tier2 vehicle standards, and low sulfur gasoline requirements.

### **FY 2007 Milestones**

- EPA promulgates final rule to reduce emissions from large commercial ships.
- EPA promulgates final rule for in-use compliance program for nonroad diesel engines.
- EPA promulgates final rule establishing OBD requirements for nonroad diesel engines.

### **FEDERAL SUPPORT FOR AIR QUALITY MANAGEMENT**

The federal support program includes HQ and Regional Office non-financial support to state, tribal, and local air pollution control agencies for the development, implementation, and evaluation of programs to implement the NAAQS. It also includes regular reviews of, revisions to, and establishment of standards for the criteria pollutants; the development of associated national guidance and outreach information for implementation of these standards; and development of emission limiting regulations for specific categories of stationary sources. The federal support program also includes working with other federal agencies to ensure a coordinated approach, and working internationally to address sources of air pollutants that lie outside our borders but pose risks to public health and air quality within the U.S. Federal financial support is addressed under "State and Local Air Quality Management" and "Tribal Air Quality Management."

Over the next several years, our focus will be on implementing the PM<sub>2.5</sub> and 8-hour ozone standards. We will continue to work with multi-state planning groups to develop strategies for reducing regional haze and with individual states to develop implementation approaches to reduce emissions of PM and ozone precursors. In addition, we will work with states and tribes to identify opportunities for better integrating ozone and PM efforts, such as improving emission inventories and comprehensive air quality modeling approaches, controlling sources of precursors common to both pollutants, and coordinating control strategy planning cycles.

We will continue to help states and local agencies implement the transportation conformity regulation and work to ensure the technical integrity of mobile source controls in SIPs. We will also work with states, tribes, and local governments and assist them in crafting strategies that accommodate growth and economic development while minimizing adverse effects on air quality and other quality-of-life factors. This includes the development of programs to identify faulty emission controls and ensure their repair so vehicles remain clean in actual customer use.

We are also working with states, tribes, and local agencies to develop an integrated ambient monitoring strategy that will refocus the existing air monitoring program towards current data collection needs for ozone, PM, and air toxics. This national monitoring strategy will provide agencies with more flexibility in designing their networks.

**Status:** The Clean Air Interstate was proposed on January 30, 2004 with promulgation in 2004. The Implementation rule for the 8-hr ozone NAAQS will be promulgated in FY 2004. Area designations for 8-hour ozone areas were announced on April 15, 2004. EPA will announce its plan to review and possibly revise its policy on the reactivity of VOCs in FY 2004. EPA will propose the PM<sub>2.5</sub> implementation rule in 2004 and finalize it in late 2004. Area designations for PM<sub>2.5</sub> will be final by December 2004. Regional Haze SIPs were submitted for Arizona, Utah, New Mexico, Wyoming and Oregon.

## **FY 2005 Milestones and Priorities**

### **Headquarters**

- Promulgate final Clean Air Interstate Rule.
- Promulgate final Clean Air Fine Particle rule by 10/31/04.
- Promulgate PM<sub>2.5</sub> area designations by 12/31/04.
- Promulgate final National Core (Ncore) ambient air monitoring network rule.
- Promulgate final Clean Air Visibility Rule and guideline by 4/30/05.
- Propose rulemaking on PM NAAQS by 3/31/05.
- Publish report on RPO program progress.
- Complete and issue guidance on the use of the most recent MOBILE model for calculating emission inventory and control strategy impacts.
- Promulgate final I/M rule for 8-hour ozone NAAQS.
- Propose Federal New Source Review rules in Indian Country.

### **Regions Implement the PM<sub>2.5</sub> NAAQS**

- Finalize and promulgate designations.
- Work with states, tribes, and local agencies to develop nonattainment area strategies.
- Work with states and local agencies to encourage early reduction programs.
- Work with HQ to finalize the Clean Air Interstate Rule; once finalized work with states to revise their SIPs.
- Regional Strategy Example: See Appendix C for a discussion of Region 9's multi-media approach to address the environmental issues associated with dairy AFOs. Decomposing manure emits air pollutants, including volatile organic compounds (precursors to the formation of both PM<sub>2.5</sub> and ozone), particulates, ammonia, methane, and odors.
- Regional Strategy Example: See Appendix C for a discussion of Region 10's strategy for addressing the smoke and air quality issues related to prescribed burning for the agricultural and forestry sectors.

### **Regions Implement the 8-hour Ozone NAAQS**

- Assist states with ozone Early Action Compacts (EACs) to ensure timely submission of their SIP revisions in December 2004. Work with states to develop approvable Phase II NO<sub>x</sub> SIP call SIPs, and to complete all base case modeling and model performance evaluation.
- Regional Strategy Example: EACs are an example of a Regional strategy that originated in Region 6 and has since been implemented nationwide. For further information see Appendix C.

### **Regions Continue to Implement the 1-hour Ozone NAAQS**

- Publish clean data finding for areas achieving the NAAQS for 1-hour ozone.
- Provide technical support to those states required to submit mid-course reviews in 2004, including preparation of example model applications, 10-year trends analyses, and other factors that can be used as part of the weight-of-evidence relative to demonstrating progress in attainment.

### Regions Implement the Regional Haze Program

- ☐ Coordinate EPA efforts to implement the ozone and PM2.5 standards with the Regional Haze rule to maximize the ability of the states, tribes, and regulated community to respond to these requirements in an integrated fashion.

### Regions Continue Work to Attain and Maintain the other NAAQS.

- ☐ Continue implementation activities to attain and maintain the NAAQS for PM10, CO, SO2, NO2, and lead. PM10 redesignation requests for Spokane Co., WA and Jackson Co., OR.
- ☐ Take rulemaking action on PM10 redesignation requests for Salt Lake Co., UT; Utah Co., UT; Jackson Co., OR; Cook Co., Lyons Township, IL; Cook Co., SE Chicago, IL; Lane Co., OR; Power-Bannock counties, ID.
- ☐ Take rulemaking action on SO2 redesignations for Weirton, WV; Hancock Co., WV; Douglas, AZ; and, San Manuel, AZ.
- ☐ Take rulemaking action on CO redesignations for El Paso, TX; Missoula, MT; Provo, UT; and, Reno, NV.

### Regions Implement Mobile Source Programs

- ☐ Assist nonattainment areas and maintenance areas with SIP preparation and implementation of mobile source control strategies such as I/M and state fuel programs. Provide technical support for implementation and unique modeling issues.
- ☐ Evaluate and promote public comprehension of the need to maintain vehicles when OBD light is illuminated.
- ☐ Review conformity determinations and/or process motor vehicle emission budget adequacy findings under the 1-hour and 8-hour ozone NAAQS for nonattainment and maintenance areas. Assist states and local air quality and transportation agencies in future conformity determinations as needed.
- ☐ With OTAQ, continue to provide training in the use of MOBILE6, and review modeling results for state and local agencies.
- ☐ Work with states to develop creditable mobile source programs.
- ☐ Work with HQ and states to implement voluntary emission control retrofit programs for existing heavy-duty diesel engines.

### Regions Implement the Title V and NSR Programs

- ☐ Review proposed initial and renewal operating permits, as necessary, to ensure consistent implementation of the Title V program.
- ☐ Prepare draft orders to citizen (public) petitions. Note process in 12/6/99 HQ guidance. Issue Title V permits to respond to objections where the permitting authority refuses to act.
- ☐ Take rulemaking action on NSR SIPs.
- ☐ Evaluate one quarter of Title V permit program pursuant to the March 2002 OIG report and set target to issue evaluation report within 90 days of evaluation.
- ☐ Evaluate NSR permit program, as warranted, and set target to issue report within 90 days of evaluation.
- ☐ Provide training and technical guidance and support to permitting authorities and the public regarding the NSR regulatory revisions and proposed regulations.



- Take action on NSR SIP/TIP submittals, equivalency demonstrations, and delegation requests submitted in response to revisions to NSR rules, including the minor source Indian Country NSR FIP.
- ☐ Review Prevention of Significant Deterioration (PSD) and nonattainment NSR permits as necessary to ensure the integrity of the NSR program.
- ☐ Issue and enforce PSD permits in states where EPA implements the federal PSD program.

#### Regions Assess Air Quality in Indian Country and Develop and Implement Tribal Programs

- ☐ Implement the CAA in Indian country using direct implementation and the Tribal Authority Rule. Meet the federal trust responsibility and promote EPA's Indian Policy. Develop and implement FIPs where necessary and appropriate. Develop regulations needed to fill regulatory gaps and ensure equal CAA protection is provided in Indian country. Direct implementation of CAA components and gap filling regulations where appropriate.
- ☐ Regional Example: See Appendix C for a discussion of the Region 10's strategy for implementing FIPs in Indian country.
- ☐ Support tribes in developing programs to implement the CAA and develop tribal measures to protect unique cultural resources and subsistence populations in Indian country. Provide training to develop tribal capacity, expertise, and abilities to manage air quality on reservations and technical support to enhance tribal capabilities in program development and implementation.
- ☐ Working with HQ, support tribes in establishing and operating CASTNet monitoring sites in their nations. CASTNet needs additional sites in the middle of the country to fill monitoring gaps and more sponsors for existing sites to be modernized. There are currently two monitoring sites in tribal nations, and we are actively seeking increased participation by tribes in CASTNet operations.
- ☐ Continue to issue and enforce initial, new and renewal operating permits and NSR permits for sources in Indian Country where a tribe has not been approved to implement such a program.
- ☐ Provide support and guidance for all tribal requests to redesignate Indian country to Class I for PSD purposes.
- ☐ Assist tribal efforts to develop and implement Title V operating and NSR permit programs for sources in Indian Country.

#### **FY 2006 Milestones**

- ☐ EPA and co-regulators implement the Clean Air Interstate Rule.
- ☐ EPA and co-regulators implement Phase I of NCore Level II monitoring network.
- ☐ EPA promulgates PM<sub>2.5</sub> nonattainment area designations.
- ☐ EPA implements PM NAAQS review response.
- ☐ EPA promulgates Federal New Source Review rules in Indian Country.

#### **FY 2007 Milestones**

- ☐ EPA and co-regulators implement Clean Air Interstate Rule.
- ☐ EPA and co-regulators implement Phase II of Ncore Level II monitoring network.
- ☐ EPA continues to implement PM NAAQS review response.

## **FEDERAL SUPPORT FOR AIR TOXICS PROGRAMS**

The federal support program includes HQ and Regional Office non-financial support to state, tribal, and local air pollution control agencies for: modeling, inventories, monitoring, assessments, strategy and program development; community-based toxics programs; voluntary programs including those that reduce inhalation risk and those that reduce deposition to water bodies and ecosystems; international cooperation to reduce transboundary and intercontinental air toxic pollution; National Toxics Inventory development and updates; Great Waters; and Persistent Bioaccumulative Toxics (PBT) activities. It also includes training for air pollution professionals. In addition, it includes activities for implementation of MACT standards and the National Air Toxics Assessment. Our strategy has four components:

- ☐ Work with partners to implement a national air toxics monitoring network and develop improved emission factors.
- ☐ Implement a residual risk program and support community assessment and risk reduction projects, and compile and analyze the information collected from them to better characterize risk and assess priorities for further action.
- ☐ Provide technical expertise and support to state, local, and tribal air toxics programs in assessing and reducing mobile source air toxics.
- ☐ Continue to develop and improve risk assessments and management methodology.

The technical elements of the toxics reduction strategy include EPA's National Emissions Inventory (NEI), the National Air Toxics Assessment (NATA), air quality modeling, and data analysis programs. In addition, the Air Toxics Monitoring Program indirectly and in some cases directly supports all the technical tools as well as the programs noted above.

### **FY 2005 Milestones and Priorities**

#### **Headquarters**

- ☐ EPA publishes NATA updated with 1999 data.
- ☐ EPA updates National Air Quality and Emissions Trends Report to include 1999 National Toxics Inventory data and 2003/2004 National Air Toxics Trends Station (NATTS) network data.

#### **Regions Assess and Reduce Risk**

- ☐ Delegate and/or otherwise ensure implementation of 100% of applicable major and area source section 112(d) standards, section 111(d) and 129 standards.
- ☐ Review quality assurance (QA) programs and ensure comparability of air toxics measurements for states and tribes.
- ☐ Work with states and tribes to identify and submit air toxics monitoring data AQS.
- ☐ Assess and review existing air toxics networks and help states, tribes, and locals site new monitors.
- ☐ Participate in at least 50% of all NATTS QA field audit visits.
- ☐ Help HQ with developing a draft state/local/tribal framework for air toxics programs.

- Use air toxics assessment results to identify areas for further study. See Appendix C for a discussion of how Region 3 is using the results of toxic assessments to target Philadelphia for a major community-based air toxics initiative. This is one of many air toxics initiatives being implemented around the Regions.
- Work with states and tribes on establishing infrastructure to implement the risk-based air toxics program focusing on urban areas first.
- Continue to build capacity of states to characterize risks, ability to use dispersion and exposure models, and conduct risk assessments.
- Work with states and tribes to identify, quantify, estimate, and reduce risk from hazardous air pollutants as they impact states, locals and Indian Country. See Appendix C for a discussion of the Great Lakes Binational Toxics Strategy and how the U.S. and Canadian governments, and others, are working together to virtually eliminate persistent toxic substances from the Great Lakes environment.
- Conduct outreach to improve public understanding of the air toxics program, particularly the risk-based aspect of the program.
- Apply appropriate tools at regional and local levels to assess baseline risks and risk reduction scenarios.
- Maintain and enhance at a minimum 22 NATTS sites nationwide (negotiations may result in additional sites being required), and assist states with their community monitoring projects funded by EPA.
- Train states and tribes on Air Toxics Program requirements.
- Participate in developing air toxics assessments that consider outdoor stationary and mobile sources as well as indoor air sources.
- Encourage states and tribes to seek voluntary reductions of air toxics.
- Work with OTAQ to help states develop voluntary, mobile source air toxics programs.
- Work with OTAQ to help states to implement voluntary emission control retrofit programs for existing heavy-duty diesel engines and school buses. See Appendix C for a discussion of how Region 2 is addressing heavy-duty diesel emissions. This is one of many different voluntary diesel emission reduction strategies being implemented around the Regions.
- Include tribal programs in federal toxics planning and implementation.
- Develop information and tools to assess and address the impact of air toxics on tribal communities with small populations and subsistence lifestyle.
- Assist tribes in carrying out monitoring activities to adequately assess potential toxics problems, and in developing tribal air quality management programs to address local problems identified by monitoring.
- Ensure tribes are included in planning and implementation activities regarding toxics monitoring networks and related activities.
- Carry out toxics assessments and monitoring activities as appropriate in Indian country.
- Ensure tribes have adequate opportunity to identify and address local exposure issues.
- Promote tribal participation in national programs and activities related to the identification and amelioration of air issues.

### **FY 2006 Milestones**

- EPA publishes National Emissions Inventory (NEI) updated with 2002 data.
- EPA updates National Air Quality and Emissions Trends Report to include 2004/2005 NATTS network and local scale project data.

### **FY 2007 Milestones**

- EPA publishes NATA updated with 2002 data.
- EPA updates National Air Quality and Emissions Trends Report to include 2002 National Toxics Inventory Data and 2005/2006 NATTS network and local scale project data.

## **STATE AND LOCAL AIR QUALITY MANAGEMENT**

The state and local air quality management program includes funding to assist state and local air pollution control agencies in developing and implementing programs to attain and maintain the NAAQS and to assess, prevent and control air pollution. The program also provides funding to regional haze planning organizations, interstate transport commissions, and other multi-jurisdictional organizations (which include state and local representation), to help coordinate air quality improvement efforts from a multi-jurisdictional perspective. State, local, and tribal agencies also maintain Title V operating permit programs for major stationary and other sources but these are funded through permit fees and are not grant-eligible.

Continuing state and local air programs are funded under section 105 of the Clean Air Act (CAA) with recipient agencies providing matching resources. Section 103 provides 100% federal funding to state, multi-jurisdictional, and local entities, including universities and other non-profits, to conduct studies, investigations, experiments, demonstrations, surveys, training, and certain forms of research, on the nature, prevention, causes and effects of air pollution. Interstate air pollution control agencies, including interstate transport commissions, receive funds under section 106 which also requires a recipient match. Additional information on the use of State and Tribal Assistance Grants is contained in Appendices A and B.

### **Strategy**

EPA's overall strategy for achieving clean outdoor air includes a comprehensive, multi-pollutant approach that combines national, regional, and local measures, with responsibilities for implementation carried out by the most appropriate and effective level of government. Problems with broad national or global impact are best handled at the federal level. State, local, and tribal agencies can best address regional and local problems that remain after the application of federal measures. In implementing the state and local air quality management component of this strategy EPA will:

- work with state, local, and other governmental partners to target available STAG resources to those air pollution problems which pose the greatest risk to the public's health (e.g., fine particulates, ozone, and hazardous air pollutants);
- allocate resources to address not only the attainment of new PM<sub>2.5</sub> and 8-hour ozone NAAQS, but also support ongoing state and local air program operations and delegated programs which help maintain healthy air quality;
- encourage support for regional and community-scale strategies that complement the impacts of federal measures (i.e., early ozone reductions, voluntary diesel retrofits and other mobile source initiatives, integrated air toxics risk assessment and reduction projects);

- target significant resources to recipients to develop, refine, and maintain monitoring systems and emission inventories which help provide a clear picture of the nature and sources of air pollution and help gauge the impacts of preventive and mitigative measures employed;
- support the efforts of regional haze planning organizations to develop information and strategies for use by states and tribes in reducing haze and improving visibility across the country, including formerly pristine areas;
- provide resources that focus on trans-boundary or bi-national, geographically-specific environmental issues involving a multi-pollutant, multi-state, and sometimes a multi-media approach; and
- provide support for training and other associated program support to assist state, local, multi-state, and other agencies in addressing their air pollution problems.

Inherent in these efforts is EPA's policy to ensure that collaborative and timely consultation occurs with its partners in the areas of planning, priority-setting, and budgeting. It is the policy of OAR and the regions to seek prior consultation with its partners on the allocation of grant resources. EPA will continue to work with the Environmental Council of States (ECOS), the National Tribal Air Association (NTAA), the State and Territorial Air Pollution Program Administrators (STAPPA) and the Association of Local Air Pollution Control Officials (ALAPCO) to identify and resolve any issues associated with the allocation and use of grant resources.

EPA will continue to place high priority on effective grants management including proper use of authorities for award, the effective use of competition where appropriate, the articulation and verification of programmatic and environmental results, and the effective oversight of agreements including compliance with programmatic terms and conditions. More information is contained in the attached Appendix A.

## **Status**

A total of over \$4 billion in air grant assistance has been provided to state, local, and multi-state agencies since enactment of the 1963 Clean Air Act. This has been complemented with an estimated \$6.6 billion in matching resources from state and local governments over the same period. Assistance is provided by Congress via the State and Tribal Air Grant (STAG) Appropriation.

For FY 2005, the total STAG funds requested by the President for air and radiation programs total \$312,750,000. This includes: \$166.1 million for continuing state and local programs, including national geographic initiatives; \$42.5 million for fine particulate monitoring; \$10 million for the continued development of a national air toxics monitoring network; and \$10 million for regional haze planning organizations. Also included in the STAG request is an increase of \$65 million for expansion of the voluntary retrofit program to reduce diesel emissions from school buses. This competitive program was funded with \$5 million in EPA resources in FY 2003 and FY 2004. Funds for Tribal air programs ( \$11.1 million) and state indoor radon

programs (\$8.15 million) are discussed in elsewhere in this guidance. Aside from the requested increase for the Clean School Bus USA program, the targeting of FY 2005 air grant resources remains largely unchanged. A draft, preliminary allocation is contained in Appendix A.

Of the nearly \$166.1 million for continuing state/local air programs, all but \$9 million is targeted for direct award to state, local, and multi-state agencies. The balance of grant funds fall into 3 categories: undistributed (\$2.4 million), centrally-administered (\$5.3 million), and direct implementation (\$1.2 million). Undistributed funds include over \$648,000 for the Ozone Transport Commission, \$1.25 million for the STAPPA-ALAPCO Secretariat, and \$550,000 for competitive mobile source outreach grants. The centrally-administered funds are used by EPA for providing associated program support to state and local agencies at their request. These activities include: CAA training (\$1.8 million), the national monitoring procurement contract (\$1 million), and nearly \$2.55 million for the NO<sub>x</sub> Allowance Trading System operated under the auspices of EPA on behalf of the affected states. Funds for direct implementation cover the Interagency Monitoring of Protected Visual Environments (IMPROVE) network (\$1.2 million) maintained for Class I areas through an interagency agreement with the Department of the Interior.

In FY 2005, EPA will be working with state, local, and tribal agencies to reexamine the most effective use and alignment of ambient air monitoring resources pursuant to the objectives of the revised National Air Monitoring Strategy. OAR will continue to target significant resources to develop, implement, and refine ambient air monitoring networks nationwide pursuant to a revised National Air Monitoring Strategy. Funds are provided under: (a) section 103 for visibility and haze (e.g., IMPROVE as noted above, fine particulates (\$42.5 million), and air toxics (NATTS and community-based monitoring - \$10 million); and (b) under section 105 for ongoing state and local air toxics monitoring (\$6.5 million) and ozone (PAMS - \$14 million).

While the development of a national air toxics trends and community-scale monitoring network will continue, FY 2005 is expected to be the first year for transition from the traditional NAMS/SLAMS framework to the NCore framework for ambient PM<sub>2.5</sub> monitoring and for photochemical assessment monitoring for ozone in the U.S. The transition to NCore represents a restructuring of the existing networks with continued operation of high value sites, plus investments and disinvestments under the revised national strategy. In the coming months EPA will engage state, local, and tribal agencies in a more detailed discussion and consultation on the resource implications of the revised network for the period from FY 2005-2007. Additional information on all of these activities is included in Appendices A and B.

### **FY 2005 Milestones and Priorities**

#### **States Implement the PM<sub>2.5</sub> NAAQS.**

- Develop and implement voluntary early reduction programs.
- Complete and submit modeling protocols.
- Complete and submit 2002 Base Year Emission Inventories.

#### States Implement the 8-hour Ozone NAAQS

- ☐ Submit complete Phase II NO<sub>x</sub> SIP Call SIPs.
- ☐ Submit Early Action Compact SIPs including all adopted measures and attainment demonstration by 12/31/04.
- ☐ Perform attainment demonstration modeling.
- ☐ Pursue activities to bring about successful SIPs to attain the NAAQS.
- ☐ Complete and submit 2002 Base Year Emission Inventories.
- ☐ Complete development of and submit modeling protocol.

#### States Continue to Implement the 1-hour Ozone NAAQS

- ☐ Complete development or adoption and submit mid-course reviews consistent with the timing in their approved SIP.
- ☐ Maintain healthy air quality in areas that are attaining.
- ☐ Submit redesignation requests for nonattainment areas that are attaining.

#### States Implement the Regional Haze Program

- ☐ Regional Planning Organizations (RPOs) achieve milestones outlined in their work plans.
- ☐ Initiate integrated PM<sub>2.5</sub>/Regional Haze section 308 SIPs.

#### States Attain and Maintain the other NAAQS.

- ☐ Maintain healthy air quality in areas attaining the NAAQS for PM<sub>10</sub>, CO, NO<sub>2</sub>, SO<sub>2</sub>, lead.
- ☐ Submit redesignation requests for areas attaining the NAAQS for PM<sub>10</sub>, CO, NO<sub>2</sub>, SO<sub>2</sub>, lead.

#### States Implement Mobile Source Programs

- ☐ Prepare SIPs including implementation of mobile source control strategies such as I/M and state fuel programs.
- ☐ Implement voluntary emission control retrofit programs for existing heavy-duty diesel engines/school buses.
- ☐ Prepare conformity determinations and motor vehicle emission budgets under the 1-hour and 8-hour ozone NAAQS for nonattainment and maintenance areas.

#### States Implement the Title V\* and NSR Programs

- ☐ Ensure sources submit Title V applications for renewal.
- ☐ Continue to issue initial and renewal Title V permits.
- ☐ Cooperate with EPA in Title V permit program evaluations, set target to respond within 90 days to EPA's evaluation report and implement recommendations as warranted.
- ☐ Cooperate with EPA in NSR permit program evaluations, set target to respond within 90 days to EPA's evaluation report and implement recommendations as warranted.
- ☐ Issue NSR permits consistent with CAA requirements and enter BACT/LAER determinations in the RACT/BACT/LAER Clearinghouse.
- ☐ Submit draft, proposed, and/or final SIPs/TIPs, equivalency demonstrations, and/or delegation requests in response to revisions to NSR rules.

\* State and local Title V activities are funded with operating permit fees collected by the permitting authorities. These activities are not eligible for CAA grant funding. EPA has delegated authority to run these programs to states and selected local agencies. The Clean Air Act requires EPA to maintain an ongoing oversight role of these programs.

### States Implement the Air Toxics Program

- ☐ Implement 100% of delegated and SIP-approved section 112(d) standards including area source MACTs and GACTs, section 111(d) or section 129 standards for major sources and area sources.
- ☐ Implement 100% of delegated residual risk standards.
- ☐ Develop air toxics programs, particularly the risk-based aspect of the program.
- ☐ Establish community scale monitoring sites in-place using locally-selected technologies.
- ☐ Review the draft NEI for HAPs from February 1, 2005-May 1, 2005 and provide revisions to EPA by May 1, 2005.
- ☐ Collect, quality assure, and report all air toxics monitoring data into AQS for PAMS, UATMP, pilot air toxics monitoring study, and NATTS..
- ☐ Share information and build capacity to identify and characterize air toxic risks.
- ☐ Assess suspected air toxics risks in local areas.
- ☐ Participate in developing regional air toxics assessments that consider outdoor stationary and mobile sources as well as indoor air sources.
- ☐ Seek voluntary reductions of air toxics.
- ☐ Develop voluntary, mobile source air toxics programs.
- ☐ Implement voluntary emission control retrofit programs for existing heavy-duty diesel engines and school buses.
- ☐ Participate in developing area source and residual risk standards.

### FY 2006 Milestones

- ☐ States pursuing those activities which will bring about successful SIPs to attain the 8-hr ozone and PM2.5 NAAQS.
- ☐ States complete and submit RACT and reasonable further progress (RFP) plans for moderate and above 8-hour ozone nonattainment areas.
- ☐ States implement Phase I of NCore Level II monitoring network.
- ☐ States submit NSR programs that are consistent with NSR reform measures.
- ☐ States implement delegated mercury MACT; or, if proposed mercury cap & trade state SIP program alternative applies, states submit plans for approval.
- ☐ States implement delegated and SIP-approved section 112(d) standards including area source MACTs and GACTs, section 111(d) or section 129 standards for major sources and area sources.
- ☐ States implement delegated residual risk standards.

### FY 2007 Milestones

- ☐ States submit approvable SIPs to attain the 8-hr ozone NAAQS.
- ☐ States submit Clean Air Interstate Rule SIPs.
- ☐ States implement Phase II of Ncore Level II monitoring network.
- ☐ States continue development of PM2.5 nonattainment area SIPs.
- ☐ States submit Regional Haze SIPs by January 31, 2008.
- ☐ Mercury MACT - If proposed MACT alternative applies, states will need to be in compliance with MACT by early 2008.
- ☐ States implement delegated and SIP-approved section 112(d) standards including area source MACTs and GACTs, section 111(d) or section 129 standards for major sources and area sources.
- ☐ States implement delegated residual risk standards.



## **TRIBAL AIR QUALITY MANAGEMENT**

The tribal air quality management program includes funding for tribal air pollution control agencies and tribes. Through CAA section 105 Grants, tribes may develop and implement programs for the prevention and control of air pollution or implementation of national primary and secondary ambient air standards. Tribes also have the authority to set standards and develop additional programs to meet their unique needs. Through CAA section 103 Grants, tribal air pollution control agencies, tribes, colleges, universities, multi-state jurisdictional air pollution control agencies, and non-profit organizations may conduct and promote research, investigations, experiments, demonstrations, surveys, studies and training related to air pollution. The National Tribal Air Association will continue to develop as a leadership and coordination organization, working to promote relationships between and amongst tribes and EPA.

### **Strategy**

EPA and tribes remain committed to completing assessments of air quality concerns in Indian country through a combination of training and support in technical and policy areas, including improving and facilitating tribal participation in the national air quality management program while they complete local assessments, source characterizations, emission inventories and develop monitoring programs. As tribes complete these steps, they are then able to make decisions on program development as appropriate. Tribal STAG funds are allocated to tribes through each Regional Office (except Region 3 which has no federally recognized tribes) based on a formula that includes a number of factors including tribal population, reservation acreage and number of Title V sources. Regional Offices then allocate funds to tribes within each region based on a draft consistency policy that directs resources to tribal governments based again on factors related primarily to environmental benefits. EPA STAG funding in recent years has been insufficient to provide grants to every tribe requesting support, so this methodology allows funding decisions to be made in a nationally-consistent manner while seeking to maximize the environmental benefit. A training program is also funded by OAR that provides an internationally-recognized curriculum developed especially for the unique needs of Indian country.

Our strategy also is to seek specific funding to support tribal interest in air toxics. Tribes have started to increase their participation in air toxics issues, but are limited by availability of funding and resources to pursue areas beyond basic programs. However, a number of tribes are interested in toxics issues, especially local issues perceived to be caused by local and regional sources such as industrial facilities and mobile sources. Tribes are also interested in larger toxics issues, particularly as they relate to deposition and bioaccumulation of persistent bioaccumulative toxins, such as mercury, dioxin and PCBs. The 229 Alaska Native Villages, many of whom rely on traditional subsistence lifestyles, have expressed particular concern over local and international toxics.

### **Status**

The OAR tribal program has accomplished significant gains in a short number of years. Currently 120 tribes receive grant support, and 150 air quality monitors are being operated in Indian country. EPA has also increased research and monitoring collaboration with tribal

partners through OAR's Clean Air Status and Trends Network (CASTNet), a long-term monitoring network measuring dry deposition, regional concentrations of acidifying agents, and ozone transport. There are currently two monitoring sites in tribal nations, and we are actively seeking increased participation by tribes in CASTNet operations. CASTNet needs additional sites in the middle of the country to fill monitoring gaps as well as more sponsors for existing operations.

In recent years tribes have started to move from assessments to program development, and 18 tribes have received delegations of CAA authority under the Tribal Authority Rule. Advanced tribes are beginning to complete and submit for approval Tribal Implementation Plans – two have been submitted to date and several more are in development. Tribes have also uniquely expressed interest in PSD redesignations to reclassify their airsheds for optimum protection against deterioration, and to date nine tribes have redesignated their airsheds to Class 1 under PSD. Over 100 tribes participate in Regional Haze planning organizations (including 66 in CENRAP), and the Western Regional Air Partnership and CENRAP are both co-chaired by a tribal leader. We expect this trend to continue, and the Tribal Operations Committee is reflecting this increasing interest in air programs in Indian country. EPA continues to strive to support the ongoing needs in this growing program.

The St. Regis Mohawk Tribe has made considerable progress through monitoring and negotiation to convince neighboring sources to reduce their toxics emissions. They continue to monitor to ensure the reductions are adequate. Tribes in the Phoenix area have worked very closely with EPA, state, city, and county governments to establish a joint air toxics study of the Phoenix metropolitan area which includes three reservations, and seek to continue and conclude these efforts with additional support. Many other tribes such as the Sioux tribe are performing source-specific toxic assessments around a Kevlar plant in Fort Cotton ND, and are interested in implementing and continuing toxics monitors to assess toxics impacts for their reservations, but are limited by the availability of funding. EPA supports these efforts where feasible, and expects that as tribes increase their sophistication and understanding of air quality, they will request increased support in areas related to toxics.

## **FY 2005-2007 Priorities and Milestones**

### **General**

- ☐ Affected tribes adopt regulations to address air quality issues for their reservations.
- ☐ Tribes develop and implement Tribal Implementation Plans.
- ☐ More tribes receive program approvals under the Tribal Authority Rule.
- ☐ Tribes continue to complete assessments and move to advanced options including program development.
- ☐ Tribes continue development of air issues through the National Tribal Operations Committee and Regional Tribal Operations Committee.
- ☐ Tribes participate in ongoing interdisciplinary efforts to understand and quantify cross-media impacts on culturally-significant environmental issues such as atmospheric deposition and bioaccumulation of harmful air pollutants. Increased participation by tribes in CASTNet monitoring operations.
- ☐ Tribes implement voluntary programs addressing local nuisance issues.
- ☐ Tribes implement voluntary programs addressing local indoor air issues.

- ☐ Many tribes begin and complete transitions to programmatic activities and funding.

#### Criteria Pollutants/Regional Haze/Title V/NSR

- ☐ Develop and implement regulatory air quality management programs to suit tribal needs
- ☐ Participate in efforts to maintain and attain the NAAQS.
- ☐ Continue to forge partnerships in participating in Regional Haze Planning.
- ☐ Complete tribal emission inventories using WRAP-developed TEISS software.
- ☐ Participate in ozone and PM redesignation issues affecting Indian country.
- ☐ Participate in monitoring efforts to the greatest extent possible to complete assessments of air quality in Indian country, support national monitoring initiatives, and ensure Indian country is properly represented in national data collection efforts.
- ☐ Acquire training and credentials to perform source inspections on reservation sources.
- ☐ Adopt and implement minor NSR Program for Indian country.
- ☐ Seek approval of the first tribal Title V permitting program
- ☐ All major sources in Indian country are permitted under the Title V permitting program

#### Air Toxics

- ☐ Share information and build capacity to identify and characterize air toxic risks.
- ☐ Assess suspected air toxics risks in local areas.
- ☐ Participate in developing regional air toxics assessments that consider outdoor stationary and mobile sources as well as indoor air sources.
- ☐ Seek voluntary reductions of air toxics.
- ☐ Develop voluntary, mobile source air toxics programs, and implement voluntary emission control retrofit programs for existing heavy-duty diesel engines and school buses.
- ☐ Participate in developing area source and residual risk standards
- ☐ Install and operate air toxics monitoring sites in Indian Country.
- ☐ Carry out and complete further study of air toxics issues in the Phoenix Metropolitan Area.
- ☐ Take steps to address toxics issues for Alaska Native Villages
- ☐ Undertake an additional tribal air toxics study.
- ☐ Implement measures to reduce toxics exposures.

## Objective 1.2 - Indoor Air

**Objective 1.2: Healthier Indoor Air.** By 2008, 22.6 million more Americans than in 1994 will be experiencing healthier indoor air in homes, schools, and office buildings.

Strategic Targets:

- By 2008, approximately 12.8 million additional people will be living in homes with healthier indoor air. These include people living in homes with radon-resistant features, children not being exposed to environmental tobacco smoke, and asthmatics with reduced exposure to indoor asthma triggers.
- By 2008, approximately 7.8 million additional students and staff will experience improved air quality in their schools.
- By 2008, approximately 2 million additional office workers will experience improved air quality in their workplaces.

EPA addresses indoor air quality issues by developing and implementing voluntary outreach and partnership programs that inform and educate the public about indoor air quality and actions that can reduce potential risks in homes, schools, and workplaces.

Through these voluntary programs, EPA disseminates information and works with state, tribal, and local governments; industry and professional groups; and the public to promote actions to reduce exposures to possibly harmful levels of indoor air pollutants, including radon. We also transfer technology by providing detailed guidance on indoor air-related building design, operation, and maintenance practices to building owners, building managers, and school facility managers and easy-to-use tools to educators and school facility managers.

EPA also provides tribes with appropriate tools and assistance to address indoor air toxics, such as radon; environmental tobacco smoke; PM; and biological issues, such as mold contamination. EPA works with other federal agencies to provide guidance and assistance on how to reduce the exposure levels of these contaminants in all Indian communities.

EPA will broaden awareness and increase action by working with national as well as local community-based organizations to design and implement programs that address critical indoor air quality problems, including radon, secondhand smoke, asthma, and mold contamination in homes, child care and school facilities, and other residential environments. Through our State Indoor Radon Grant Program, we will continue to help states that have not yet established the basic elements of an effective radon assessment and mitigation program, and will support innovation and expansion in states that already have programs. Other indoor environment programs will focus on expanding national awareness of asthma triggers through outreach to schools, child care centers, health care providers, and the general public.

Our strategies for improving indoor air quality and increasing the number of people breathing healthier indoor air are implemented through the following four programs:

- Asthma
- Schools and Workplaces
- Environmental Tobacco Smoke
- Radon

More information on each of the four programs follows.

## **ASTHMA PROGRAM**

This program includes voluntary programs that address asthma triggers through a variety of programs including raising asthma awareness through outreach, partnerships, and education. EPA's strategy is to implement a national, multi-faceted asthma education and outreach program to improve and expand the delivery of comprehensive asthma care programs to reach more people, more effectively. This program reaches out to the general public, schools and child care communities, and the health care community through partnerships with federal agencies and non-governmental organizations committed to improving the quality of life for children with asthma. The program includes:

- ☐ National public awareness and media campaigns.
- ☐ Community-based outreach and education.
- ☐ Enhancement and application of programmatic support data.

### **Status**

In FY 2004, work under four current program areas will increase:

- ☐ Health care/managed care organization outreach, including work with the American Association of Health Plans representing 175 million Americans;
- ☐ National awareness campaigns, including a third wave of EPA's PSA campaign and World Asthma Day activities;
- ☐ Working to increase school based and in-home asthma programs; and
- ☐ Improving our understanding of effective interventions and improving tools for measuring results

## **SCHOOLS AND WORKPLACES**

This program includes voluntary programs and activities that address indoor air quality in schools through Tools for Schools (TfS) and office building air quality management approaches as well as outreach, training and educational activities, and potential guidance. Our strategy is to implement a national education and outreach program to inform the public, schools, school districts, educators, and building professionals about the importance of creating and maintaining healthy indoor environments in schools and workplaces. Our program relies on three key implementation/educational tools:

- ☐ Indoor Air Quality (IAQ) Tools for Schools: A comprehensive tool kit that can help school officials maintain a healthy environment in their school buildings by identifying, correcting, and preventing indoor air quality problems. Using the tool kit, school officials can educate staff, students, and parents about the importance of good IAQ.
- ☐ IAQ Design Tools for Schools: A tool to help school districts and facility planners design new schools as well as repair, renovate, and maintain existing facilities. Though its primary focus is on indoor air quality, it is also intended to encourage school districts to

embrace the concept of designing High Performance Schools, an integrated, "whole building" approach to addressing important – and sometimes competing – priorities, such as energy efficiency, indoor air quality, day-lighting, materials efficiency, and safety, and doing so in the context of tight budgets and limited staff.

- IAQ Building Education and Assessment Model (I-BEAM): Comprehensive, state-of-the-art guidance for managing IAQ in commercial buildings.

### **Status**

In FY 2004, EPA will sponsor its 5<sup>th</sup> annual Tools for Schools Symposium and National Tools for Schools Awards Program, continue to expand its mentoring program, expand promotion of the new IAQ Design Tools for Schools guidance, and work with five national school organizations to expand implementation of Tools for Schools.

## **ENVIRONMENTAL TOBACCO SMOKE**

This program includes voluntary programs and activities such as providing outreach, training and education to caregivers that address environmental tobacco smoke (ETS) in the home and areas where children are frequently present. EPA implements its secondhand smoke (ShS, or ETS) program through a national education and outreach program that supports the Department of Health and Human Service's Healthy People 2010 objectives. Although EPA's mission addresses all involuntary exposure to ShS, EPA's efforts target the risks to millions of children age 6 and younger. EPA's 4-pronged strategy includes:

- Multi-Media Efforts on ShS to promote behavior change associated with children's exposure to ShS.
- Smoke-free Homes Pledge which targets the parents of young children, advising them of the health consequences of exposing children to secondhand smoke inside the home.
- Technical Support provided directly to state, local, and tribal governments and public health organizations to develop and make available tools and resources that promote behavior changes in parents and guardians that result in smoke-free homes.
- Nationally-directed Pilot Efforts focused on changing clinical practices in pediatric offices to heighten parent awareness and promote smoke-free homes and concentrated effort on reducing risk disparities among at-risk populations.

### **Status**

In FY 2004, EPA will continue to raise awareness of secondhand smoke through its national media campaign, its Smoke-free Home Pledge Campaign and through a collaborative effort with the Ad Council and the Legacy Foundation. IED will also work with cooperative partners to expand community-based secondhand smoke education and prevention programs such as "Not in Mama's Kitchen."

## **RADON**

This program includes voluntary national, regional, state, and tribal programs and activities that address radon primarily in homes. EPA implements its radon program through a national program and through the State Indoor Radon Grants (SIRG) program. Through the Radon program, EPA:

- Provides analytic support to develop, implement, and enhance programs to assess and mitigate radon risks.
- Promotes adoption of local real estate disclosure laws and policies and works with the real estate community to include radon testing and disclosure in residential real estate transactions.
- Encourages voluntary radon-resistant construction and national, state and local radon-resistant code adoption to effect the construction of new homes built with radon-resistant features.

### **Status**

In FY2004, EPA will support initiatives targeted to increase the effectiveness of state radon programs; increase the number of homes tested and mitigated through direct education and outreach to the public, and increase leveraging real estate and new construction opportunities.

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### **Indoor Air Programs -Milestones for FY 2005-2007**

- ☐ An estimated additional 500,000 children and low income adults will have reduced exposure to asthma triggers in FY 2005, 2006, and 2007.
- ☐ In schools, an estimated additional 1,300,000, 600,000, and 600,000 students and staff will experience healthier indoor air each year in FY 2005, 2006, and 2007, respectively.
- ☐ In buildings, an estimated additional 150,000, 240,000, and 240,000 building occupants will experience healthier indoor air each year in FY 2005, 2006, and 2007, respectively.
- ☐ An estimated additional 300,000 children aged 6 and under will no longer be exposed to secondhand smoke in the home each year in FY 2005, 2006, and 2007.
- ☐ An estimated additional 250,000 people will experience healthier indoor air as a result of radon mitigation or radon resistant construction each year in FY 2005, 2006, and 2007.

### **Indoor Air Programs - Priorities for Regions**

- ☐ Continue to serve as the local, community-based point of contact to disseminate information and foster implementation of the indoor air programs.
- ☐ Provide grants oversight for the SIRG program. See Appendix A - SIRG Technical Guidance.
- ☐ See Appendix C for a discussion of partnerships that have been formed in Region 2 and the strategies they are pursuing to address asthma.

## Objective 1.3 - Stratospheric Ozone

**Objective 1.3: Protect the Ozone Layer.** By 2010, through worldwide action, ozone concentrations in the stratosphere will have stopped declining and slowly begun the process of recovery, and the risk to human health from overexposure to ultraviolet radiation, particularly among susceptible subpopulations, such as children, will be reduced.

### Strategic Targets

- By 2010, atmospheric concentrations of the ozone-depleting substances CFC-11 and CFC-12 will have peaked at no more than 300 and 570 parts per trillion respectively, while production of these chemicals will be allowed only for very limited essential uses.
- By 2010, all methyl bromide production and import, except for exemptions permitted by the Montreal Protocol, and 45 percent of all HCFC production and import, will be phased out, further accelerating the recovery of the stratospheric ozone layer.

As a signatory to the *Montreal Protocol on Substances That Deplete the Ozone Layer* (Montreal Protocol), the U.S. is obligated to regulate and enforce its terms domestically. In accordance with this international treaty and related Clean Air Act requirements, EPA will continue to implement the domestic rule-making agenda for the reduction and control of ozone-depleting substances (ODS), such as chlorofluorocarbons (CFCs), and enforce rules controlling their production, import, and emission. This implementation includes combining market-based regulatory approaches with sector-specific technology guidelines and facilitating the development and commercialization of alternatives to methyl bromide and hydrochlorofluorocarbons (HCFCs). We will strengthen outreach efforts to ensure efficient and effective compliance, and continue to identify and promote safer alternatives to curtail ozone depletion. To help reduce international emissions, we will assist with the transfer of technology to developing countries and work with them to accelerate the phase-out of ozone-depleting compounds.

Because the ozone layer is not expected to recover until the middle of this century at the earliest, the public will continue to be exposed to higher levels of ultra-violet (UV) radiation than existed prior to the use and emission of ODS. Recognizing this fact and the public's current sun-exposure practices, EPA will continue education and outreach efforts to encourage behavioral changes as the primary means of reducing UV-related health risks.

## DOMESTIC PROGRAMS

This program includes activities for regulatory programs to restore the ozone layer and voluntary programs to reduce public health risk. For the period 2005-2007, EPA's domestic strategy for stratospheric ozone protection will focus on:

- Undertaking measures to ensure achievement of incremental targets for reducing production of class II substances between 2010 and 2030, when HCFC production is to be phased out under the Clean Air Act.
- Limiting production of class I substances such as CFC-11, CFC-12, and methyl bromide to uses identified as critical or essential under the Montreal Protocol.



**Status:** As of January 2004, the U.S. has succeeded in phasing out new production and importation of most class I substances, with the exception of certain applications for which the search for acceptable, non-ozone depleting alternatives continues. For class II substances (HCFCs), EPA has phased out production of HCFC-141b.

#### **FY 2005-2007 Milestones and Priorities**

- EPA phases out methyl bromide production except for critical uses allowed under the Montreal Protocol.
- ☐ EPA allocates production allowances for all remaining classes of HCFCs.
- ☐ EPA proposes a rule to determine which equipment HCFC-142b and HCFC-22 may be exempted from the ban on production of those chemicals that under current plans will take effect in 2010.
- Regions carry out enforcement actions related to programs under Title VI of the CAA, including servicing of motor vehicle air conditioners, recycling of ozone-depleting substances, and emissions of phased-out substances. For additional information see the National Program Guidance issued by the Office of Enforcement and Compliance Assurance.

#### **MULTILATERAL FUND**

This program includes the Multilateral Fund that promotes international compliance with the Montreal Protocol by financing the incremental cost of converting existing industries in developing countries to cost-effective, ozone-friendly technology. Our strategy is to continue to support the Ozone Secretariat's Multilateral Fund, which provides resources to developing nations to facilitate their transition to non-ozone-depleting substances. For the period 2005-2007, we will focus on:

- ☐ Maximizing developing country reductions in ozone-depleting substances by moving aggressively from a project-by-project approach to a national phase-out strategy approach.
- ☐ Accelerating the shift to CFC alternatives by accelerating the closure of CFC manufacturers in developing countries.
- ☐ Increasing support to developing country institutions to enable effective implementation of policy measures.

#### **Status**

To date, the Fund has supported over 4,480 activities in 134 countries that, when fully implemented, will prevent annual emissions of more than 174,000 metric tons of ODSs. In addition, the Fund has reached long-term agreements to dismantle over 2/3 of developing country CFC production capacity and virtually all of developing country halon production capacity. Final closure of related facilities depends on continued funding. EPA's FY 2003 contribution to the Multilateral Fund helped the Fund support cost-effective projects designed to build capacity and eliminate ODS production and consumption in over 60 developing countries.

#### **FY 2005-2007 Milestones and Priorities**

- By 2005, negotiate closure agreements with all remaining CFC producers in developing countries.

- By 2006, cease consideration of individual investment projects in favor of national or sectoral phase-out strategies.
- By 2006, increase support to developing country institutions by 50% in at least 25% of all developing countries in return for performance-based agreements that would enable active implementation of new policy measures.
- Note: Achievement of above milestones is contingent upon full payment to the Fund of agreed contributions by all Parties to the Montreal Protocol, including the United States. For the United States, full payment must be made by both EPA and the Department of State.

## Objective 1.4 - Radiation Protection

Objective 1.4: Radiation. Through 2008, working with partners, minimize unnecessary releases of radiation and be prepared to minimize impacts to human health and the environment should unwanted releases occur.

Sub-objective 1.4.1: Enhance Radiation Protection. Through 2008, protect public health and the environment from unwanted releases of EPA-regulated radioactive waste and minimize impacts to public health from radiation exposure. By 2008, increase the total number of drums of radioactive waste certified by EPA as properly disposed to 140,171 (420.5 million milli curies) from 47,171 (141.5 million milli curies) in 2003.\*

\* In memo dated 11/4/2003, ORIA documented the need to update the strategic target for the WIPP based on a revised analysis of DOE shipments through September 2003. The updated strategic target should read as follows: "By 2008, increase the total number of drums of radioactive waste certified by EPA as properly disposed to 283,787 (851.4 million millicuries) from 72,787 (218.4 million millicuries) in 2003. (The estimated total drums to be deposited at the Waste Isolation Pilot Plant [WIPP] is 860,000 [2.6 billion millicuries] over the next 35 years.)"

Sub-objective 1.4.2: Maintain Emergency Response Readiness. By 2008, ensure Agency readiness to inform the public about and protect them from airborne releases of radiation. By 2008, 80 percent of EPA's 300-person Radiation Emergency Response Team will meet scenario-based response criteria, up from 50 percent in 2005. By 2008, EPA's National Radiation Monitoring System will cover 70 percent of the U.S. population. (2005 baseline: 37 percent of the U.S. population)

EPA helps prevent public exposure to harmful levels of radiation in the environment, by working with other federal, state, tribal, and local agencies to assess exposure risks, managing radioactive releases and exposures, ensuring proper disposal of radioactive materials, and providing the public with information about radiation and its hazards. Should an event occur, EPA maintains a high level of preparedness to respond to radiological emergencies. These responsibilities form the core of our strategy to protect the public and the environment from unnecessary exposure to radiation. Our strategies for radiation include three program areas:

- ☐ Radiation Protection
- ☐ Radiation Response Preparedness
- ☐ Homeland Security Preparedness, Response, and Recovery

### **RADIATION PROTECTION**

This program includes activities for radiation clean up, federal guidance, risk modeling, Clean materials, Waste Isolation Pilot Plant (WIPP), Yucca Mountain work, radiation air toxics, naturally-occurring radioactive material, radiation waste management, and radioactive and mixed-waste operations and measurements.

### **Strategy**

Using a collaborative strategy, EPA works with the public, industry, states, tribes and other governmental agencies to inform and educate people about radiation risks and promote actions that reduce human exposure. EPA also provides radiation guidance and develops regulations as appropriate. Key programmatic activities include:

- maintaining certification and oversight responsibilities for DOE waste disposal activities at the WIPP.
- promoting the management of radiation risks in a consistent and safe manner at Superfund, DOE, DOD, state, local, and other federal sites.
- assessing exposure risks and providing information about radiation and its hazards
- maintaining appropriate methods to manage radioactive releases and exposures
- evaluating the human health and environmental risks from radiation exposure
- providing national-level guidance on the risks posed by radioactive materials in the environment.

### **FY 2005-2007 Milestones and Priorities**

- An estimated 40,000, 45,000, and 45,000 additional drums of radioactive waste certified by EPA as properly disposed will be deposited at the WIPP in FY 2005, 2006, and 2007 respectively.
- Regions continue to serve as the local, community-based point of contact to disseminate information on EPA's radiation protection program.
- Regions work with states on mining legacy waste disposal issues.

## **RADIATION RESPONSE PREPAREDNESS**

This program includes federal preparedness activities including radiation emergency response team and equipment, training and outreach, radiological emergency response guidance, and the national environmental radiation monitoring system.

### **Strategy**

Using a collaborative strategy where appropriate, EPA works with tribes and other federal and state and local agencies to ensure that the appropriate parties are fully informed and prepared to respond should an incident involving radiation occur. EPA's key activities that support our radiation response preparedness include:

- preparing for and responding to incidents involving radioactive materials through regular exercises and experience
- issuing Protective Action Guides
- coordinating with other organizations to ensure thorough response and preparedness planning
- ensuring the safety of the U.S. and international metal supply
- providing radioanalytical laboratory capabilities

### **FY 2005-2007 Milestones and Priorities**

- An estimated 50%, 60%, and 70% of Radiation Emergency Response Team (RERT) team members will meet scenario-based response criteria in FY 2005, 2006, and 2007 respectively. The RERT encompasses 300 individuals.

- Regions continue to serve as the local, community-based point of contact to disseminate information on EPA's radiation response and preparedness program, activities, and capabilities. As appropriate, regions should:
  - S provide on-site technical support to state radiation, solid waste, and health programs that regulate radiation remediation
  - S participate in Protective Action Guideline workshops
  - S participate in radiological response exercises

## **HOMELAND SECURITY PREPAREDNESS, RESPONSE, AND RECOVERY**

This program includes developing plans, procedures, and standards to respond to major hazardous substance and oil releases caused by weapons of mass destruction or nationally-significant terrorist incidents. Ensure readiness of EPA preparedness and response personnel through planning, training, and exercises. Coordinate Homeland Security activities with the Department of Homeland Security and other federal agencies to ensure consistency with the National Response Plan.

### **Strategy**

EPA's strategy for developing, enhancing, and implementing the national monitoring system as part of homeland security preparedness, response, and recovery efforts includes the following components:

- Near-site emergency monitoring
- Fixed air monitoring through the Environmental Radiation Ambient Monitoring System (ERAMS)
- Deployable monitoring

These three components will provide EPA with data for nuclear emergency response assessments, data on ambient levels of radiation in the environment, and data for public officials and the general public.

### **Status**

EPA continues to be primarily involved in four program areas:

- Improve radioactive waste management
- Build a comprehensive framework to expand and enhance voluntary programs
- Continue our commitment to Emergency Response/Homeland Security
- Continue providing regional offices with radiation analytical and technical support

EPA is currently evaluating the comments received on the Advanced Notice of Proposed Regulation (ANPR) for Low Activity Waste published in October 2003, recertifying the Waste Isolation Pilot Project, continuing to integrate radiation data into the Agency's information systems and making radiation information more accessible to the public, and enhancing ERAMS to better respond to radiation emergencies and be better prepared for potential terrorist threats. We are also continuing efforts to create and enhance voluntary programs to better protect the

nation's ports of entry, find alternatives to radiation sources in industry, and improve disposal options for radioactive sources in commerce.

**FY 2005-2007 Milestones and Priorities**

- In FY 2005 through 2007, EPA expects to purchase an additional 60, state-of-the-art monitoring units, bringing the total to 120. By 2007, these units will be operational and will cover approximately 60% of the U.S. population. (The current radiation air monitoring system covers about 24% of the U.S. population.) Through a series of upgrades by 2009, EPA will have in place a real-time system covering 70% of the U.S. population by 2009.
- Regions will continue to serve as the local, community-based point of contact to disseminate information on EPA's national monitoring system.

## Objective 1.5 - Climate Change

**Objective 1.5: Reduce Greenhouse Gas Intensity.** Through EPA's voluntary climate protection programs, contribute 45 million metric tons of carbon equivalent (MMTCE) annually to the President's 18 percent greenhouse gas intensity improvement goal by 2012. (An additional 75 MMTCE to result from the sustained growth in the climate programs are reflected in the Administration's business-as-usual projection for greenhouse gas intensity improvement.)

### Strategic Targets

- Through EPA's ENERGY STAR® program, prevent 27 MMTCE in the buildings sector in 2012, in addition to the 20 MMTCE prevented annually in 2002.
- Through EPA's industrial sector programs, prevent 80 MMTCE in 2012, in addition to the 43 MMTCE prevented annually in 2002.
- Through EPA's transportation programs, prevent 13 MMTCE in 2012, in addition to the 2 MMTCE being prevented annually as of 2002.

In 2002, President Bush announced a U.S. climate policy to reduce the greenhouse gas (GHG) intensity of the U.S. economy by 18% over the next decade. EPA's strategy for helping to improve GHG intensity is to enhance its partnerships with businesses and other sectors through programs that deliver multiple benefits in addition to reducing GHG intensity – from cleaner air to lower energy bills. At the core of these efforts are voluntary government-industry partnership programs designed to capitalize on the opportunities that consumers, businesses, and organizations have for making sound investments in efficient equipment, policies and practices, and transportation choices.

## **CLIMATE PROTECTION PROGRAM**

This program includes voluntary domestic and international programs that address GHG and climate change issues. Efforts are aimed at reducing emissions of GHGs and mitigating the effects of global climate change on the environment and human health while growing the economy. EPA's strategy for 2005-2007 includes:

- Continue the successful Energy Star partnerships in the residential and commercial buildings sector by adding new products to the Energy Star family, raising awareness of the Energy Star label, and continuing to promote superior energy management to organizations of all sizes.
- Continue to build on the success of the voluntary programs in the industrial sector by enhancing the rate of energy and resource efficiency improvements through the Energy Star and WasteWise programs; cost-effectively keeping emissions of methane at 1990 levels or below through 2010; cost-effectively limiting emissions of the more potent greenhouse gases (HFCs, PFCs, SF<sub>6</sub>); and facilitating the use of clean energy technologies and purchases of renewable energy.

- Continue non-regulatory, transportation business-government partnerships to reduce GHG intensity in the transport sector. The two existing programs – Best Workplaces for Commuters and SmartWay Transport – will grow significantly and will be supplemented with new non-regulatory partnerships with the business sector.
- Develop and demonstrate innovative and ultra-clean and fuel-efficient vehicle technologies. Work with partners in industry to transfer engineering expertise on EPA's advanced technologies so that industry can commercialize them.

**Status:** As of 2002, EPA's climate programs had reduced GHG emissions by 65 MMTCE. By 2012, EPA expects these programs to help avoid an additional 120 mmtce of GHGs.

### **Milestones for FY 2005-2007**

- |      |   |
|------|---|
| 2005 | Reduce GHG emissions from projected levels by approximately 90 MMTCE per year through EPA partnerships with businesses, schools, state and local governments, and other organizations.  |
| 2006 | Reduce GHG emissions from projected levels by approximately 102 MMTCE per year through EPA partnerships with businesses, schools, state and local governments, and other organizations. |
| 2007 | Reduce GHG emissions from projected levels by approximately 115 MMTCE per year through EPA partnerships with businesses, schools, state and local governments, and other organizations. |
- Demonstrate technology such as mild hydraulic hybrid retrofits, full hydraulic hybrids, clean diesel combustion, homogeneous charge compression ignition engines, or variable displacement engines. By 2007, these technology demonstrations will demonstrate 70-100% fuel economy improvement in light-duty vehicle applications or 40-60% fuel economy improvement in heavy-duty applications.

**FY 2005 Priorities for Regions, States, Tribes:** Lead by example in the area of energy efficiency and clean energy and promote making the cleaner energy choice to stakeholders. This includes:

- making commitments to procure Energy Star qualifying products and encouraging other organizations to do the same.
- ensuring tribal governments and communities are included as partners in GHG activities, and ensure they participate in and benefit from ongoing coordinated efforts and outreach programs
- ensuring that the power management feature of Energy Star qualifying computer monitors is enabled and encouraging other organizations to do the same.



- rating the energy performance of buildings, schools, hospitals, etc, using EPA’s national energy performance rating system, applying for the Energy Star label for the qualifying superior buildings, and determining improvement plans for those that do not currently qualify; and encouraging other organizations to do the same;
- making or encouraging energy efficiency improvements and clean energy choices by promoting a range of innovative financial and policy mechanisms, including:
  - S purchasing green power
  - S integrating energy efficiency and clean energy into air quality plans (i.e., SIPs), and state supplemental environmental projects (SEPs)
- creating pilot programs to use the commercially-available advanced technology in fleets (such as state/municipal vehicles, school buses, or refuse vehicles) to produce cost-effective emissions and fuel consumption reductions.
- □ supporting Best Workplaces for Commuters and SmartWay Transport through:
  - S outreach to local and regional government, nonprofit agencies, and businesses
  - S presentations for local and regional business organization meetings
  - S promotion of BWC and SmartWay Transport at local and regional trade shows
  - S assisting with regional marketing campaigns.

**Appendix A**  
**Additional Information and Guidance for Outdoor and Indoor Air Quality Programs**  
**Funded with FY 2005 STAG Assistance**

Appendix A includes additional information and guidance on selected activities supported with the State and Tribal Air Grant (STAG) appropriation. These activities are part of the larger State and Local Air Quality Management program under the Healthier Outdoor Air objective and the radon program under the Healthier Indoor Air objective. Appendix A is divided into five sections: fundamental elements of good grants management, areas of emphasis and change in ambient monitoring programs, information on other significant air program activities, a preliminary FY 2005 air grant allocation, and information on the FY 2005 state indoor radon grant program and preliminary allocation.

<u>Section</u>	<u>Contents</u>
I	Effective Grants Management <ul style="list-style-type: none"><li>-- Proper Authorities for Award</li><li>-- Promoting Competition</li><li>-- Achieving Programmatic and Environmental Results</li><li>-- Ensuring Effective Oversight</li></ul>
II	Additional Information on Ambient Monitoring <ul style="list-style-type: none"><li>-- Fine Particulate Monitoring Network</li><li>-- Photochemical Assessment Monitoring Stations Network</li><li>-- Air Toxics Monitoring Network Development</li><li>-- IMPROVE Visibility Monitoring</li></ul>
III	Other Significant Air Program Areas <ul style="list-style-type: none"><li>-- National Geographic Priorities<ul style="list-style-type: none"><li>-- U.S.-Mexico Border Air Pollution</li><li>-- Great Lakes Air Deposition Program</li></ul></li><li>-- Multi-State Programs<ul style="list-style-type: none"><li>-- Regional Haze Multi-Jurisdictional Planning Organizations</li><li>-- Northeast Ozone Transport Commission</li><li>-- STAPPA-ALAPCO Secretariat</li></ul></li><li>-- National Program Support<ul style="list-style-type: none"><li>-- NOx Reduction Programs</li><li>-- Mobile Source Outreach</li><li>-- National Procurement Contract for Monitoring</li></ul></li></ul>
IV	Preliminary State/Local Air Grant Allocation
V	State Indoor Radon Program and Preliminary Allocation

## **Section I. EFFECTIVE GRANTS MANAGEMENT**

EPA places a high priority on effective grants management. The Agency and OAR have issued directives, policies, and guidance to help improve grants management and ensure environmental results.

Using Proper Authorities for Award. OAR's "Guidance for Funding Air and Radiation Activities Using the STAG Appropriation (11/12/99)," helps identify the appropriate statutory authority to use in awarding STAG grants. EPA funds state, tribal, and local continuing air programs using the authority of section 105 of the Clean Air Act and funds the Ozone Transport Commission (OTC) using section 106 of the Act. The Agency uses the authority of section 103 to fund most other clean air activities, including the national fine particulate (PM<sub>2.5</sub>) monitoring network, the air toxics monitoring pilots, tribal capacity building, and regional planning organizations (comprised of state, local and tribal representatives). EPA awards radon assistance grants under sections 10 and 306 of the Toxic Substances Control Act (TSCA).

Promoting Competition. EPA's policy is to promote competition in the award of grants and cooperative agreements, and to ensure that the competitive process is fair and open, with no applicant receiving an unfair advantage. EPA Order 5700.5, effective September 30, 2002, includes the requirements for implementing this policy. In drafting the order, EPA recognized that it is not practical to compete certain grants and cooperative agreements. The competition order exempts grants for continuing environmental programs, such as those funded under section 105. The order also exempts: CAA section 103 grants for fine particulate monitoring, air toxics monitoring pilots, regional haze planning, and federally-recognized tribes and inter-tribal consortia under OAR's tribal grant program; TSCA section 306 grants for state indoor radon programs; and TSCA section 10 grants for tribal radon programs. The order does not preclude EPA from allocating grant funds for a portion of these programs through competition, if the Agency determines it is in the best interest of the public. The order may be found at: <http://www.epa.gov/ogd/grants/competition.htm>. For more information on competition in air assistance programs, contact Kari Bilal at 202-564-1356.

Achieving Programmatic and Environmental Results. OAR's national guidance outlines selected programmatic and environmental results expected from state, tribal, and local programs funded by grants. Performance objectives and measures related to the grant-funded activities discussed specifically in this guidance are included within the respective sections of the narrative and Appendix C. Regional offices should use the national technical guidance in the negotiation of project, categorical and performance partnership grant agreements with grantees. Approved agreements should meet the requirements of 40 CFR 31 and 40 CFR 35, as appropriate. Pursuant to 40 CFR 35.107, both section 105 and Performance Partnership agreements should include milestones, deliverables, and expected outcomes or accomplishments.

Ensuring Effective Oversight of Assistance Agreements. EPA issued Order 5700.6, effective January 8, 2003, to streamline post-award management of grants and cooperative agreements and to help ensure effective oversight of recipient performance and management. The order encompasses both the administrative and programmatic aspects of the Agency's financial assistance programs. It requires each EPA office providing assistance to develop and carry out a post-award monitoring plan, and conduct basic monitoring for every award. From the

programmatic standpoint, this monitoring should ensure satisfaction of five core areas: (1) compliance with all programmatic terms and conditions, (2) correlation of the recipient's workplan/application and actual progress under the award, (3) availability of funds to complete the project, (4) proper management of and accounting for equipment purchased under the award, and (5) compliance with all statutory and regulatory requirements of the program.

Offices must conduct advanced monitoring on a portion of grant awards each year and carry out more extensive contact with, and review of, recipient performance. Both levels of oversight must be documented in the official grant file. Regional offices may find more information on the order at <http://epawww.epa.gov/oinijhbk/order/5700.6.pdf>. To assist EPA project officers in oversight of assistance agreements, EPA has developed a grant inquiry project management tool that is available on the Agency's intranet. For more information on this tool, contact William Houck (202-564-1349) or Katherine Moore (202-564-1514).

## **Section II. ADDITIONAL INFORMATION ON AMBIENT MONITORING**

### **INTRODUCTION**

Over the last few years EPA has been working with its state, local and tribal monitoring partners on a strategy for restructuring the ambient air monitoring networks. A major purpose of the strategy is to optimize the networks to be more responsive to current and future needs (e.g., a balance of traditional trends monitoring with multi-pollutant and continuous monitoring). This work, identified as the National Ambient Monitoring Strategy, covers ambient air monitoring at all National Air Monitoring Stations (NAMS), State and local Air Monitoring Stations (SLAMS), and Photochemical Assessment Measurement Stations (PAMS). These networks help measure criteria pollutants, air toxics, and ozone precursors. The monitoring strategy has employed assessments of these networks at the regional and state levels to identify and prioritize high value monitoring as well as identify unnecessary monitoring for divestment. As a result of the assessments already completed, many agencies have initiated modest changes to their networks that can enable a redirection of limited resources to new higher priority monitoring. The guidance, which provides additional direction on the use of such PM, PAMS and air toxics monitoring resources, reflects the collaborative efforts of all the stakeholders to date in the refinement of the National Ambient Air Monitoring Strategy.

### **FINE PARTICULATE MONITORING NETWORK**

As part of the early work on the National Ambient Air Monitoring Strategy, a series of monitoring assessments were performed in 2000 to facilitate decision making on which PM<sub>2.5</sub> monitoring sites should be retained and where new investments should be made. The assessments identified several potential areas for divestment and reinvestment. Areas of interest to PM monitoring included reinvesting monitoring resources for trace level measurements of CO, SO<sub>2</sub>, and NO<sub>2</sub>/NO<sub>y</sub> monitoring to better characterize gases that lead to particle formation and a larger network of PM<sub>2.5</sub> continuous monitors.

As a follow-up to the national assessment, each of the 10 EPA Regional Offices were tasked with performing a regional assessment to evaluate their networks. A workshop was held in

September 2003 where regional assessments were presented. While the degree of completeness and approach taken in the assessments varied by region, the results generally provided specific recommendations on each regional network's changes over the coming years including the direction of resources to highest monitoring priorities. This guidance is an extension of the regional assessments.

Accordingly, FY 2005 is expected to be the first year of transition from the traditional NAMS/SLAMS framework to the National Core (NCore) framework for ambient air monitoring in the United States.<sup>1</sup> For PM<sub>2.5</sub> this means: continued operation of high value Federal Reference Method (FRM) and speciation sites; additional investments in PM<sub>2.5</sub> continuous monitoring and associated data management systems for timely reporting of high quality data; and initial investments of trace gas analyzers to support better understanding of particle formation.

The transition to NCore represents a restructuring of the existing networks with continued operation of high value sites, plus investments and disinvestments. To provide a more clear understanding of the expected outcomes in using 103 funds to support ambient air monitoring objectives, the following goals for the monitoring network have been developed:

- Appropriate spatial characterization of PM<sub>2.5</sub> NAAQS.
- Public reporting of PM<sub>2.5</sub> in the Air Quality Index (AQI);
- Characterization of PM<sub>2.5</sub> chemical speciation data for long term trends, development and accountability of emission control programs, and tracking of regional haze;
- Initial implementation of NCore CO, SO<sub>2</sub>, NO<sub>2</sub>/NO<sub>y</sub> trace gases to support characterization of PM precursors.
- Assessment of PM<sub>2.5</sub> data;
- Procurement and testing of PM<sub>2.5</sub> filters.

The total program budget has remained the same as in FY2004 at \$42.5 million. While the total program budget has not changed, the amounts allocated to the specific categories within the budget will likely change.

- S There is an expected decrease in the number of required filter-based monitoring sites that are to accompany implementation of the NCore network. In FY 2005 modest reductions are expected to occur in areas that are attaining the PM<sub>2.5</sub> standards. Additional reductions are expected to take place in FY 2006 once the transition to NCore is formalized in the monitoring regulations. These reductions are expected mostly in urban sites where redundancies exist. As a result, there is an expected reduced cost of operating the FRM network than in previous years, which has reduced the costs for operations and maintenance, filters, laboratory analysis, and quality assurance.
- S For the speciation monitoring program all trend sites across the nation plus high value non-trend sites in areas that are expected to be above the NAAQS are expected to be maintained. In areas that are below the NAAQS, a modest reduction in non-trend sites is expected.

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<sup>1</sup> See "National Ambient Air Monitoring Strategy-Revised Draft," 9/6/2002, OAQPS. A final version is expected in CY2004.

- S With greater emphasis on speciation and the Interagency Monitoring of Protected Visual Environments (IMPROVE) network comparability, a few additional state protocol IMPROVE sites are being planned, per the states' discretion, for the network. In FY 2004 the budgets for speciation lab analysis and IMPROVE (i.e., PM pre-cursors) had been reduced to utilize available carryover money. Since those monies are expected to be drawn down this year, the combined speciation and IMPROVE budgets for FY 2005 are planned at a higher level of funding.
- S The size of the PM<sub>2.5</sub> continuous monitoring network continues to grow, supporting real time data reporting of the AQI across the country. The size of this network is expected to keep increasing as NCore is implemented and some of the FRM sites are replaced by approved PM<sub>2.5</sub> continuous monitors. Therefore, an increase in the number of continuous PM<sub>2.5</sub> measurements is expected to be realized, with a commensurate increase in the operations budget for that category.

Two additional areas of funding are targeted in the FY 2005 grant guidance for PM<sub>2.5</sub> monitoring: (1) data management systems to support real time reporting of data, and (2) state-directed data analysis. Historically, PM<sub>2.5</sub> monitoring has been a filter-based program with little need to dedicate resources to data management systems. With a push towards PM<sub>2.5</sub> continuous monitoring over the last couple of years, many stakeholders have recognized the need to invest in data management systems. In support of this activity, several regions have dedicated available PM<sub>2.5</sub> 103 carryover money towards data management systems. This grant guidance provides a limited amount of resources for investment in data management systems to support PM continuous monitoring systems and PM precursor trace gases.

Resources for state-directed data analysis are intended to address a void that exists for data analysis. Presently state and local agencies perform a limited amount of data analysis on their own data. EPA also provides data analysis through products such as the annual trends report and routine data reports through AQS. Through the national monitoring strategy, planning and review data analysis has been identified as an important state need for further investment to maximize use of data. These resources will be used to provide assessments of monitoring data produced from the PM<sub>2.5</sub> monitoring program. States and locals will coordinate with EPA and prioritize assessments to perform that are not currently available from other assessments.

Table A-1 provides an historical comparison of FY 2003, FY 2004, and proposed FY 2005 for the various costs associated with the PM<sub>2.5</sub> monitoring network.

**Table A-1. Historical Comparison of PM-2.5 Costs**

	FY2003		FY2004		FY2005	
	State/local	OAQPS	State/local	OAQPS	State/local	OAQPS
Operation & Maintenance (O&M) for Federal Reference Method (FRM) sites	\$23,569,750		\$21,237,492		\$18,368,000	
Filter costs		\$523,605		\$496,487		\$407,643
IMPROVE in Class I areas		\$2,380,000		\$2,213,420		\$2,374,790
IMPROVE State Protocol sites		\$957,000		\$891,000		\$1,320,000
QA/ Performance evaluation		\$1,961,000		\$1,912,000		\$1,936,000
O & M for chemical speciation sites	\$4,940,500		\$4,851,500		\$4,733,000	
Laboratory analysis	\$409,925	\$5,570,700	\$413,670	\$6,705,051	\$288,636	\$6,324,663
O & M for continuous mass sites	\$2,187,520		\$3,779,380		\$4,109,480	
Data Management Systems to Support Real Time Reporting of Data					\$705,000	
<i>PM precursors - trace Gas capital acquisition and O/M</i>					\$1,732,788	
<i>State Directed Data Analyses</i>						\$200,000
Subtotal	\$31,107,695	\$11,392,305	\$30,282,042	\$12,217,958	\$29,936,904	\$12,563,096
Total (Region +HQ)	\$42,500,000		\$42,500,000		\$42,500,000	
Percent of Totals	73%	27%	71%	29%	70%	30%

For FY 2005, EPA has requested \$42.5 million to meet the continued costs of the PM2.5 monitoring network including operation, maintenance, filter analysis, and data management. This allocation template below (Table A-2) is being developed in consideration of the investments that need to be made for NCore, the phased approach for the strategy, the network assessments and design plans being developed in each region, and the available resources and costs of various components of the monitoring. New records highlighted in italics are being added to the table below that are consistent with the key investments of the National Ambient Air Monitoring Strategy. For more information on PM2.5 monitoring, contact Tim Hanley at 919-541-4417 or via email at: [hanley.tim@epa.gov](mailto:hanley.tim@epa.gov).

**Table A-2. Section 103 Funding for PM-2.5 Monitoring - FY 2005**

	Region										
	1	2	3	4	5	6	7	8	9	10	TOTAL
<b>Regional Allocations</b>											
O/M for FRM samplers	1,096,400	1,089,600	2,253,500	4,026,500	3,081,000	1,927,900	1,175,800	1,308,300	1,830,700	578,300	18,368,000
O/M for continuous samplers	\$241,560	\$232,920	\$95,160	\$797,880	\$625,560	\$461,160	\$131,760	\$193,680	\$499,800	\$830,000	\$4,109,480
O/M for speciation samplers & monitors	\$323,000	\$339,500	\$394,500	\$890,000	\$850,000	\$429,000	\$318,000	\$219,000	\$751,500	\$218,500	\$4,733,000
O/M for trace gas monitors	\$130,500	\$87,000	\$43,500	\$217,500	\$203,000	\$87,000	\$43,500	\$87,000	\$43,500	\$43,500	\$986,000
Data Management Improvemts at S/L's	\$0	\$175,000	\$150,000	\$0	\$55,000	\$75,000	\$50,000	\$0	\$150,000	\$50,000	\$705,000
Trace gas and other capital	\$81,900	\$95,400	\$47,700	\$0	\$267,288	\$95,400	\$47,700	\$0	\$47,700	\$63,700	\$746,788
State Lab analysis	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$233,886	\$54,750	\$288,636
Subtotal	1,873,360	2,019,420	2,984,360	5,931,880	5,081,848	3,075,460	1,766,760	1,807,980	3,557,086	1,838,750	\$29,936,904
<b>Nationally Administered</b>											
Filter cost CY2005	\$25,540	\$24,379	\$54,576	\$93,316	\$59,143	\$45,235	\$28,376	\$26,894	\$40,832	\$9,353	\$407,643
QA/FRM Performance Evaluation	\$121,000	\$123,200	\$239,800	\$431,200	\$286,000	\$211,200	\$121,000	\$158,400	\$189,200	\$55,000	\$1,936,000
IMPROVE	\$86,356	\$43,178	\$64,767	\$259,068	\$86,356	\$280,657	\$43,178	\$518,136	\$626,081	\$367,013	\$2,374,790
IMPROVE-State protocol (Lab costs)	\$264,000	\$66,000	\$33,000	\$66,000	\$132,000	\$99,000	\$264,000	\$66,000	\$297,000	\$33,000	\$1,320,000
Laboratory analysis (Speciation)	\$352,458	\$528,687	\$607,011	\$1,546,89	\$1,037,79	\$607,011	\$332,877	\$313,296	\$607,011	\$391,620	\$6,324,663
State Directed Data Analyses	\$12,873	\$13,262	\$18,835	\$39,378	\$31,599	\$20,419	\$12,086	\$13,668	\$25,140	\$12,741	\$200,000
Subtotal	862,228	798,706	1,017,989	2,435,860	1,632,891	1,263,521	801,517	1,096,393	1,785,265	\$868,727	\$12,563,096
<b>Total PM-2.5 funding</b>	<b>2,735,588</b>	<b>2,818,126</b>	<b>4,002,349</b>	<b>8,367,740</b>	<b>6,714,739</b>	<b>4,338,981</b>	<b>2,568,277</b>	<b>2,904,373</b>	<b>5,342,351</b>	<b>2,707,477</b>	<b>\$42,500,000</b>



## PHOTOCHEMICAL ASSESSMENT MONITORING STATIONS (PAMS) NETWORK

Required by section 182(c)(1) of the Clean Air Act, the PAMS program collects ambient air measurements in the worst ozone nonattainment areas for a target list of volatile organic compounds (VOCs), NO<sub>x</sub>, and ozone, as well as surface and upper air meteorological measurements.

OAR anticipates completing a review of the overall monitoring strategy during CY 2004. As part of that effort, OAR expects to revise the PAMS and other monitoring requirements in a proposal for publication during 2004, or early 2005. In revising the PAMS requirements, OAR expects to define a minimal "core" PAMS network necessary to meet the objectives of the PAMS program.

Some of the anticipated changes to the PAMS requirements are:

- The number of required PAMS sites will be reduced. Only one Type 2 site will be required per area regardless of population and Type 4 sites will not be required. Only one Type 1 or one Type 3 site will be required per area.
- The requirements for speciated VOC measurements will be reduced. Speciated VOC measurements will only be required at Type 2 sites and one other site (either Type 1 or Type 3) per PAMS area.
- Carbonyl sampling will not be required.
- NO<sub>2</sub>/NO<sub>x</sub> monitors will only be required at Type 2 sites.
- Trace level NO<sub>2</sub>/NO<sub>y</sub> will be required at one site per PAMS area (either Type 1 or Type 3).
- Trace level CO will be required at Type 2 sites.

These potential adjustments in PAMS monitoring are expected to be phased in over a three year period, starting in FY 2005. While the FY 2005 PAMS allotments are virtually the same for each region as in FY 2004 (see Table A-3), less funds should be needed to meet what will be a revised set of minimum core PAMS program requirements. OAR and the regions will work closely with the state and local agency recipients to prepare for possible changes. This includes a realignment of funding available beyond the needed minimum core program requirements to additional PAMS-related monitoring and/or data analysis based on area-specific needs.

As part of the development of the monitoring strategy, several other programmatic needs have been identified that support PAMS monitoring activities. These needs include the development and implementation of a national PAMS data assessment plan, the development and updating of PAMS QA and training documents, and performing National Performance Audit Program (NPAP) audits at select PAMS areas. The EPA estimates that it will take \$0.5 million to perform these tasks in 2005. The EPA has discussed these needs with the affected state and local agencies, and will work with them to identify funds to accomplish these tasks.

Currently, the \$14 million for PAMS provides \$9.3 million for program implementation /operation, \$3.5 million for data analysis, and \$1.2 million for meteorological monitoring. FY 2005 funds will continue to support six types of activities: system implementation, data reporting to AQS, data analysis, meteorological monitoring, quality assurance, and SIP development. Guidance for the use of grant funds for the five types of activities is presented below. Table A-3 shows the allocation of funds among regions for FY 2005.

**Table A-3. Distribution of Funds for PAMS Support**

Region	Number of PAMS Areas	Data Analysis	Meteorological Monitoring and Analysis	Implementation	Total
1	5	\$726,297	\$250,000	\$1,875,815	\$2,852,111
2	1	\$232,415	\$50,000	\$521,060	\$803,475
3	3	\$348,623	\$150,000	\$937,907	\$1,436,530
4	1	\$145,259	\$50,000	\$416,848	\$612,107
5	2 <sup>1</sup>	\$290,519	\$100,000	\$818,978	\$1,250,267
6	4	\$617,603	\$200,000	\$1,761,029	\$2,578,632
7	0	\$0	\$0	\$0	\$0
8	0	\$0	\$0	\$0	\$0
9	8 <sup>2</sup>	\$1,162,075	\$400,000	\$2,907,303	\$4,469,378
10	0	\$0	\$0	\$0	\$0
<b>Totals</b>	<b>24</b>	<b>\$3,522,791</b>	<b>\$1,200,000</b>	<b>\$9,279,709</b>	<b>\$14,002,500</b>

<sup>1</sup>Chicago and Milwaukee have a combined network.

<sup>2</sup>South Coast Air Quality Management District (AQMD) and Mojave Desert AQMD have a combined network.

## PAMS Activities

### (1) Continue System Implementation:

- Reduce number of monitoring sites and monitoring at remaining sites in accordance with revised PAMS regulations or approved alternative plans developed as part of reconfiguration efforts.
- ☐ Operate remaining existing sites for all PAMS areas.
- ☐ Continue to improve NO<sub>x</sub> monitoring, replacing NO<sub>x</sub> instruments with NO<sub>y</sub>/NO instrumentation and/or more sensitive NO<sub>2</sub>/NO<sub>x</sub> monitors at select PAMS sites.

### (2) Data Analysis:

- Continue to develop and implement PAMS data analysis plans at the regional, state, and local levels that demonstrate use of data, provide analyses demonstrating data analysis products and results commensurate with allocated resources targeted for data analysis in Table 4, column 3.
- ☐ Develop and implement a PAMS data analysis plan at the national level.
- ☐ Perform the minimum set of PAMS data analyses specified in EPA guidance.
- ☐ Support a data analyst position for each of 24 PAMS areas.
- ☐ Submit data into AQS consistent with 40 CFR Part 58.

### (3) Meteorological Monitoring:

The allocation for meteorological monitoring is to support both surface and upper-air

meteorological monitoring, processing, and quality assurance of data, and support of activities necessary to provide the data to the user community. Specific requirements include:

- ☐ Surface measurements of wind direction, wind speed, temperature, and humidity at all PAMS sites and additional measurements of solar radiation, ultraviolet radiation, pressure, and precipitation at one site in each PAMS area.
- ☐ Upper-air measurements of wind direction, wind speed, and temperature at a representative location in each PAMS area. The upper-air monitoring program will depend upon region-specific factors such that the optimum design for a given PAMS region is expected to be some combination of remote sensing and conventional atmospheric soundings.

(4) Quality Assurance:

- ☐ All sites must have a Quality Assurance Project Plan (QAPP) approved by a regional office. Regions should advise OAQPS-EMAD of the approval dates.
- ☐ Prepare and update Quality Assurance guidance and training documents.
- ☐ Conduct NPAP audits at select PAMS areas.

(5) SIP Development:

- ☐ Affected state and local air pollution agencies should use PAMS data to develop and optimize ozone control strategies.
- ☐ Affected state and local air pollution agencies should develop trends in ozone precursors, based on PAMS data, that may serve to corroborate their “rate-of-progress” demonstrations.
- Affected state and local air pollution agencies should use PAMS data to corroborate ozone precursor emissions inventories and to address transport concerns.

For more information on PAMS please contact either Kevin Cavender (919-541-2364) or David Lutz (919-541-5476).

## AIR TOXICS MONITORING NETWORK DEVELOPMENT

The FY 2005 national air toxics monitoring program will have a three-fold goal: (1) establishing a firm quality program based on consistency and technical validity, reporting initial analytical values to both the monitoring community and interested stakeholders; (2) establishing community-scale projects designed to capture information on "typical" and "atypical" toxics profiles; and (3) establishing community-scale projects.

For the first two goals, we will build on the protocols established in FY 2004. For instance, the national air toxics trends stations (NATTS) laboratory and field staff are working with EPA to ascertain the optimum methods for capturing and analyzing core pollutants associated with risk, developing performance based quality indicators to prove valid data results that will contribute to our understanding of risks, and stabilizing the measurements for all 22 NATTS sites so that comparisons across the nation can be made. With these protocols in place in FY 2005, the analytical community will then begin initial trends analysis to ascertain toxics concentration levels, and relate that data to levels of risk. (This initial trends analysis will be performed on the January 2004 through December 2004 data set.)

The third goal is to establish community-scale projects. These projects are intended to better

characterize air toxics problems at the local level and to address those problems through local actions which complement regulatory requirements. Monitoring has the potential to inform us on what the air toxic problem is at the local level and measure what reductions have been achieved through actions taken. In general, the community projects can help develop a baseline that will provide information on what the local air toxics problem may be, and point the direction needed for national policy development on reducing emissions from particular sources. More detailed guidance is available in the attached Appendix B, “National Air Toxics Monitoring Program: FY 2005 State and Local Agency Grant Guidance and Allocation.” Contact Sharon V. Nizich in OAQPS’ Monitoring Group (via 1-919-541-2825 or at [nizich.sharon@epa.gov](mailto:nizich.sharon@epa.gov)) for more information.

### IMPROVE Visibility Monitoring Network

The IMPROVE network was started in 1987 as part of a federally-promulgated visibility plan and operated by the Department of the Interior (DOI) under the direction of a multi-agency federal/state steering committee. EPA expanded the original network in FY 1999 and FY 2000 from approximately 30 sites to 110 sites. The expanded network covers all of the CAA Class I areas where visibility is important (except the Bering Sea which is impractical to monitor). The states and tribes have added an additional 36 sites to provide supplemental coverage in non-Class I areas to support the visibility and PM<sub>2.5</sub> programs. These sites are termed ‘IMPROVE Protocol’ sites and operate using the same measurement and analysis protocols. EPA provides funds to the DOI to help maintain the IMPROVE network. The DOI and the other participant organizations contribute approximately \$3.5 million of their own funds or in-kind resources to support an additional 10 protocol sites and for supplemental visibility monitoring activities.

The IMPROVE network collects data on visibility, including optical, photographic, and speciated particulate data. EPA is working with the regional planning organizations (RPOs) to implement the regional haze rule. Data from IMPROVE sites also are expected to meet the regional haze rule requirements of states for monitoring Class I area long-term trends, as well as being useful in the required periodic assessments of progress towards the national visibility goal. States also will use data from the IMPROVE network in developing strategies to implement the fine particulate standard.

For FY 2005, a total of \$5.5 million is targeted to support the IMPROVE visibility network. This money will support aerosol monitoring activities at 110 IMPROVE sites, 30 state-run protocol sites, 10 co-located state-run protocol sites and 11 tribal protocol sites. This amount is comprised of \$1.25 million in STAG funds that have traditionally been targeted for this activity, \$3.8 million of the \$42.5 million targeted for the establishment of the national fine particulate monitoring network (to help assess PM pre-cursors), and approximately \$0.4 million from tribal air monitoring grants. For more information contact Neil Frank at 919-541-5560 or Marc Pitchford at 702-895-0432.

## **Section III. ADDITIONAL INFORMATION ON SPECIFIC AIR AND RADIATION PROGRAM AREAS**

### MULTI-STATE PROGRAMS: National Geographic Priorities

**U.S.-Mexico Border Air Pollution:** The proximity of states and localities in EPA’s Regions 6

and 9 to the Mexican Border presents a number of trans-boundary air quality challenges. Many Border area residents, especially those in heavily urban areas, are exposed to health-threatening levels of air pollutants including ozone, particulate matter, carbon monoxide, sulfur dioxide, and air toxics. Visibility impairment exists in most of the Class I areas along and near the Border. Accurate evaluation of air quality in the Border will allow both countries to successfully target controls and reduce levels of air pollutants.

The Agency's activities are designed to encourage, develop and implement cooperative projects with various levels of the Government of Mexico so that sustained, comprehensive pollution abatement can occur in the common airsheds of Border sister cities, as well as in remote areas where trans-border air pollution occurs. Although state/local/tribal partners are increasingly engaged, frequently this is only possible by direct efforts of the federal governments of the U.S. and Mexico working together. In this way, EPA is providing vital support to the ongoing efforts of state, local, tribal, and multi-state organizations.

The *Border 2012: U.S. Mexico Environmental Program*, signed on April 3, 2003, was created to promote regional as well as border-wide strategies to improve air quality through coordinated air quality planning and management activities, such as the development of emissions inventories; the deployment, operation, and maintenance of air monitoring networks; the development of alternative fuels and energy sources; the development of innovative and progressive air quality management approaches; the design of air quality plans for the reduction and control of air pollution; and the development of public awareness and participation.

Over the next several years, the implementation of air pollution emission reducing strategies will be developed and implemented through the regional workgroups, task forces, and policy forums under the *Border 2012 Program*. For this reason, it will be difficult to identify partners and projects prior to the submissions of proposed projects on an annual basis. Additionally, the *Border 2012 Program* relies heavily upon input and grass-roots improvement strategies. Encouraging local and grass-roots strategies is the Agency's commitment to full and open competition for many grants and contracts, which will empower a larger number of state, local, and tribal entities to become active participants in border air quality improvements.

[Note: Because of new EPA policies requiring more complete competition among potential grantees and contractors, the Regions cannot provide a list of FY 2005 partners at this time. Below are the likely project types that will be included in Regional Requests for Proposal (RFPs) for FY 2005. It is EPA's discretion which of the following project types will ultimately receive funding.]

**Table A-4. DRAFT FY 2005 U.S.-Mexico Border Air Quality Funding Requests**

1. Enhancing energy efficiency in border communities with focus on municipalities and independent school districts, including documentation and quantification of kilowatt-hours and air pollutant emissions reduced.
2. Installing renewable energy projects in border communities, including documentation and quantification of kilowatt hours and air pollutant emissions reduced.
3. Working with State of Texas and/or State of New Mexico partners and EPA to produce a video (bilingual) that highlights practical methods of energy efficiency and renewable energy for border area city officials, staff, and residents.

4. Enhancing baseline air quality monitoring in Ciudad Juarez, Mexico to include upgrading and replacement of existing air monitoring and meteorological devices and infrastructure provided under loan by EPA.
5. Providing assistance to the City of Ciudad Juarez, Mexico and SEMARNAT to operate, quality-assure, and report data to EPA from the air and meteorological monitoring network provided under loan by EPA.
6. Working with SEMARNAT, Mexico state and local governments, and NGOs to identify additional monitoring needs in the border zone of Mexico which directly may impact U.S. air quality
7. Operating, quality-assuring, and reporting data to EPA from the existing border air and meteorological monitoring network in Texas operated by the Texas Commission on Environmental Quality (TCEQ) via U.S.-Mexico border grants.
8. Operating, quality-assuring, and reporting data to EPA from the existing border air and meteorological monitoring network in New Mexico operated by (New Mexico Environmental Department (NMED) via U.S.-Mexico border grants.
9. Assessing the PM<sub>2.5</sub> and haze impacts on all of Texas, with special emphasis on the Texas border area, from fires in Mexico and Central America.
10. Providing administrative and technical support to the Paso del Norte Joint Advisory Committee for Air Quality Improvement, to include translation at meetings, advertisement of meetings, assistance in technical planning, air monitoring and analysis and emissions inventory assistance, arrangement of, and participation in, other binational meetings.
11. Managing the U.S.-Mexico border air quality program for the State of New Mexico.
12. Managing the U.S.-Mexico border air quality program for the State of Texas.
13. Monitoring, assessing, and analyzing the non-fire effects of international pollution transport on Texas air quality and haze episodes, including impacts on Texas class I areas.
14. Expanding the air pollution emissions inventory for northern Mexico previously facilitated by the Western Governors Association to include the U.S. border zone and then the remainder of Mexico.
15. Providing assistance to the Arizona Department of Environmental Quality to establish a monitoring network and meteorological measurements in Yuma, Somerton, San Luis, Fort Yuma Indian Reservation, West Cocopah Indian Reservation, and with support from Mexican environmental officials in Sonora and Mexicali, Baja, California.
16. Provide assistance to the State of Arizona to continue air monitoring efforts in Nogales, Arizona and Nogales, Sonora for PM<sub>10</sub>, air toxics and outreach efforts.
17. Provide assistance to the State of Arizona to continue air monitoring efforts in Douglas and Agua Prieta.
18. Continue support to the State of California to operate a network of air monitoring stations in Tijuana, Rosarito, Tecate, Mexicali, and Calexico.
19. Provide assistance to the WGA for outreach efforts for the border energy bi-lingual website and audits of different energy consumption sectors along the border.
20. Support HQ's initiative, "Binational Air Quality Strategy," by providing funding for a cross-border emissions reduction credits project in the Imperial-Mexicali Valley.

21. Providing assistance to the State of California and Baja, California for the establishment of a Bi-lingual Air Quality and Health Information Center for the Imperial County-Mexicali Region. The project would establish an on-line service to provide air quality and health information to residents of Imperial County and Mexicali through an interactive website.
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**Great Lakes Air Deposition Program.** Atmospheric deposition of air toxics is known to be one of the main environmental drivers negatively affecting the water quality and ecosystem health of the Great Lakes. The Great Lakes Program supports improvements to, and applications of, multi-media strategy development and assessment tools needed to identify the contribution and effects of toxic air deposition to the Great Lakes region. Priority activities include: identification of air toxics sources, development of accurate and comprehensive air toxics emission inventories, monitoring of air toxics deposition, modeling of atmospheric dispersion and deposition of toxic pollutants, assessment of long-range atmospheric transport of toxic pollutants to the Great Lakes region, and assessment of the effects of atmospheric toxic pollutants on fish and wildlife. These activities are consistent with the goals of the Clean Air Act, the Great Lakes Binational Toxics Strategy, the Great Waters Program, and the Office of Water's Total Maximum Daily Load (TMDL) Program.

The development of this information is critical in establishing the basis to create further regulations and strategies to minimize atmospheric loadings to the Great Lakes and other inland water bodies. The results of this work are used to guide federal, state, and local policy for the Great Lakes and other fresh water ecosystems. EPA, the eight Great Lakes states, and the Great Lakes Commission (GLC) will work together to support activities based on the information needs of regulators and the relevance to toxics efforts.

Previous efforts funded under this program have focused on the atmospheric deposition of mercury to lakes and land, a national priority and a global concern. In addition, the development of atmospheric deposition analyses and robust toxic inventories are critical in establishing the basis to develop further state regulations and strategies to minimize atmospheric loadings to the Great Lakes and other inland water bodies. The inventory work will continue to be incorporated into national air toxics efforts. Current projects are focusing on identifying new sources of known and emerging pollutants in order to ascertain the need for further environmental controls. Recently, cause for human health and ecological concern regarding new chemicals has led to the investigation of emerging chemicals including polybrominated diphenyl ethers.

In FY 2004, all funds allocated to the Great Lakes were awarded fully to the GLC, a multi-jurisdictional organization representing the eight Great Lakes states. For the past decade, the GLC has coordinated the Great Lakes regional air toxics inventory project. Starting in FY 2004, the GLC is also coordinating the award of addition funding to meet the research needs of state agencies. The project activities, outcomes and funding priorities will be state-driven. Representatives from the eight Great Lakes States will provide significant input to the GLC in the selection of award recipients for projects in the region through participation on project management and technical review teams.

In FY 2005, EPA will continue to work closely with the GLC and the Great Lakes states to see continued improvement and application of multi-media strategies to address air deposition. EPA will highlight priority projects based on the regulatory and scientific needs of the Great Lakes states. In addition, research information and data collected as part of this effort will be shared via a Great Lakes Commission website.

To support the Great Lakes activities in FY 2005, the Agency has allocated just under \$1.2 million in STAG resources. For more information, including guidance on those entities eligible for receipt of funds, contact Erin Newman at 312-886-4587.

#### MULTI-STATE PROGRAMS: Multi-Jurisdictional Organizations

**Regional Haze Planning Organizations.** The President's budget request for FY 2005 includes \$10 million for RPOs, continuing the level requested for FY 2004. Under the present award cycle, EPA will soon award FY 2004 funds to the RPOs. These funds will address a wide variety of project tasks from expanding ammonia monitoring networks and initiating particle size distribution studies to developing and projecting fire emissions inventories and expanding modeling efforts.

Through the successful efforts of the Western Regional Air Partnership (WRAP), and Regions 6, 8, 9 and 10, the section 309 Regional Haze SIPs for Arizona, Utah, New Mexico, Wyoming and Oregon have been developed and submitted for review and approval. The submission of the Regional Haze SIPs by these five states represents a significant milestone. Recognizing that 76 percent of all Class I areas and over 83 percent of the total Class I acreage are within the WRAP boundaries, it is important that EPA continue to work with these states and the WRAP to maximize the regional haze benefits that can be derived from these SIPs, as well as transfer this knowledge to those remaining WRAP states that will be developing section 308 Regional Haze SIPs for submission in January, 2008. The WRAP will continue significant work in 2004 updating and refining the causes of haze, conducting BART analyses, performing significant modeling work and control strategy development and analysis and providing technical analyses for Alaska. Approximately half of the project activities for FY 2004 will focus on emissions inventory and modeling work.

The Visibility Improvement State and Tribal Association of the Southeast (VISTAS) is accelerating its project work in order to fully meet the needs of their states that have extended administrative or legislative review lead times. Data analysis, emissions inventory refinement and projections, and modeling activities account for approximately 60 percent of their project work for FY 2004.

The Midwest RPO, in building off of the FY2003 monitoring and data analysis activities, will work to update tribal inventories, as well as other specific tribal projects. Additionally they will focus on non-road inventories, refinement of mobile6 inputs, future year inventory projections and BART analyses. Again, emissions inventory and modeling projects comprise almost 50 percent of their project work for FY 2004.

The Mid-Atlantic/Northeast Visibility Union (MANE-VU) similar to the Midwest RPO will continue several of their efforts in monitoring and data analysis. A large portion, approximately 60 percent, of MANE-VU's FY 2004 tasks involve emissions inventory work and modeling and control strategy development. While both Midwest and MANE-VU have fewer Class I areas they are faced with significant regional haze precursor issues that continue to require significant monitoring, data analysis and modeling to assess both contribution as well as needed control strategies. With the schedules now harmonized for both the PM and regional haze SIPs, much of the work done by these RPOs will serve a dual purpose.



The Central States Regional Air Planning Association (CENRAP) continues to focus efforts on emissions inventory refinements and on expanding ambient monitoring and data analysis for both visibility and haze precursors, such as ammonia. Model performance evaluations are being conducted, with base case and future year modeling and preliminary work in control strategy development all included as FY 2004 project tasks. Approximately 40 percent of CENRAP's FY 2004 tasks are associated with emissions inventory and modeling work.

**Northeast Ozone Transport Commission.** The OTC was created pursuant to sections 176A and 184 of the Clean Air Act. The OTC represents northeastern and mid-Atlantic states in the ozone transport region (OTR): (a) in assessing interstate transport of ozone and its precursors, and (b) in determining the need for, and appropriateness of, additional control measures within the OTR, or in areas affecting the OTR. The OTC is supported by a small executive staff that functions largely to coordinate OTC activities, facilitate communication among members, and serve as the point of contact for organizations external to the OTC, including EPA.

For FY 2004-2005, the OTC's work continues to focus on six areas: general analytical support to member states; analysis of mobile, stationary, and area source measures, particularly new clean air technologies; member communications; solicitation of non-governmental stakeholder input; coordination with other organizations; and consensus building. The focus areas are supported by OTC committees that develop and recommend specific action items for the Commission and the member states. The OTC implements its policy recommendations through consensus resolutions and draft model rules that provide guidance to member states. EPA continues to provide approximately \$650,000 to fund these activities.

The OTC, as MANE-VU, also serves as the regional haze planning organization for the OTR, in concert with the Northeast States for Coordinated Air Use Management and the Mid-Atlantic Regional Air Management Association. For more information contact Pat Childers at 202-564-1082.

**STAPPA/ALAPCO Secretariat.** STAPPA and ALAPCO are the national associations for state, territorial, and local air pollution control agencies in the U.S. STAPPA and ALAPCO are represented by a Secretariat with a small staff located in Washington, D.C. The objective of the Secretariat is to coordinate the air quality activities of state and local air pollution control officials at the national level and to engage in activities that enhance the effectiveness of their agencies. The Secretariat disseminates information, plans and sponsors workshops, serves as a state/local liaison to EPA, coordinates member participation on EPA technical committees, produces technical assistance for members, and addresses air pollution control issues in concert with other public and private interests.

Funding for the Secretariat has been identified as part of the national allocation at the request of the member state and local agencies for numerous years. Traditionally, the STAPPA and ALAPCO boards (comprised of state and local air pollution control officials) act on a request from the Secretariat for a two-year period and request that EPA set aside funds from the participating state and local agencies' grant funds on a proportional (i.e., population) basis. As STAPPA and ALAPCO are forward-funded, these funds go to support their secretariat for the ensuing fiscal year. The STAPPA-ALAPCO Secretariat has requested a total of just over \$1.4 million in FY 2005 STAG funds for its FY 2006 grant year. Of this amount, approximately \$1.25 million would be requested directly of EPA to be set-aside. The balance would be direct-billed to the four member states

preferring that payment approach. The actual funding is dependent upon final approval of the STAPPA and ALAPCO executive boards, which represent the state and local membership; further consultation with, and concurrence of, the affected state and local agencies; as well as EPA's action on a formal, approvable request. A jurisdiction not participating in STAPPA-ALAPCO does not provide funds for its support. For more information, contact Bill Houck at 202-564-1349 or via email at – [houck.william@epa.gov](mailto:houck.william@epa.gov)

**Other multi-jurisdictional organizations.** A state or local agency wishing to fund a multi-jurisdictional organization may: (a) direct that the EPA region set aside that agency's desired contribution from its prospective allotment (i.e., on a pre-allotment basis); or (b) directly fund the organization once the agency receives its allotment. These options also apply to funding STAPPA-ALAPCO, which coordinates the interests of participating state and local agencies at the national level. STAPPA-ALAPCO, because of its *national* focus, continues to be shown as a national line item at the discretion of those state and local agencies wishing to contribute their funds.

Funding for multi-jurisdictional organizations (MJOs) formed by state and local agencies to coordinate their air quality interests at the *regional level* is not delineated individually as part of the national region-by-region allocation of CAA STAG funds. Funding levels for these organizations are included within the relevant subobjective categories of their respective region or regions.

Over the next several months, the regional offices will be working with their state and local agencies to identify the appropriate level of funds to be targeted on a pre-allotment basis for multi-jurisdictional agencies. OAR's "Guidance for Funding Air and Radiation Activities Using the STAG Appropriation," issued on November 12, 1999, describes the appropriate uses of STAG funds for multi-jurisdictional agencies.

## NATIONAL PROGRAM SUPPORT

**Programs to Reduce NOx Emissions.** NOx emissions from major stationary sources contribute significantly to the formation of ground-level ozone, a significant public health and environmental problem. Long-range transport of ozone and precursor pollutants means that analysis and problem-solving must involve all of the jurisdictions with sources contributing to, and populations affected by, these pollutants. Experience has demonstrated that one of the most effective ways to achieve this is through a multi-jurisdictional, market-based approach using a well-designed, centrally-administered NOx emissions budget and trading system.

In FY 2004, OAR allocated approximately \$2.5 million for support of the combined NOx Budget Program which emanated from the Sip Call. This market-based program in the eastern portion of the U.S. will be complemented by the addition of those states and sources which are a part of the Phase II addition to this program which was recently promulgated and requires the establishment of new allowance accounts in 2005. OAR will allocate approximately the same level of funding for FY 2005 plus the supplemental funds to cover the new addition of the Phase II sources in Georgia and Missouri. This will bring the total funding level to approximately \$2.7 million with over 2300 units reporting in 2006 and over 2,600 expected to be in the program in 2006 and beyond.

EPA's administration of the trading program for the states is considered associated program

support. As such, the affected state grant funds within each region have been identified in advance of actual allotment to the affected states. Accordingly, this support is not included in individual state grant agreements and does not affect a state's cost-sharing requirements. Jurisdictions not affected by the trading programs have not had to contribute their grant resources to support them.

**Mobile Sources Outreach Assistance.** The Office of Transportation and Air Quality (OTAQ) conducts a comprehensive outreach effort, which includes a successful mobile source public education and outreach program. The program is implemented through an outreach assistance competition for eligible state and local governments using section 105 authority. Recipients of assistance in this competitive grant program must be state, tribal, and local air management agencies (as defined by CAA section 302(b)) and be eligible to receive funding under CAA section 105 authority. These agencies are encouraged to forge partnerships with other public health, transportation, business and non-profit organizations involved in mobile source-related air quality issues to undertake qualifying projects. All projects and products developed under this program must be replicable and transferable to other state, tribal, and local air management agencies nationwide. This approach ensures that significant benefits are leveraged from limited resources and that agencies share the products developed.

The program is entering its ninth year in 2005. Worthy proposals consistently exceed available funding. Funding for FY 2005 is again proposed to be \$550,000. Each year all of the STAG grant funds targeted for this program return directly to state, tribal, and local air agencies. For more information, contact Susan Bullard at 202-564-9856 or via email at: [bullard.susan@epa.gov](mailto:bullard.susan@epa.gov)

**Program Support for Monitoring.** EPA makes procurement services available to state and local agencies, via a national contract, for the bulk purchase of ambient monitoring equipment, supplies, sample analysis, and associated data reporting/archiving (see Table A-5). This approach provides significant cost-savings to state and local agencies. The six monitoring areas include: nonmethane organic compounds, urban air toxics, carbonyls, PAMS, hazardous air pollutants, and particulate matter filters (PM10 and total suspended particulates). A new task was added to the national contract in FY 2004 for performance evaluation (PE) sample support for agencies participating in NATTS.

Traditionally, the Office of Air Quality Planning and Standards (OAQPS) works with regions to determine the level of funds that each state wants to allocate for the national procurement contract. The procurement services offered by the Agency range from providing individual states with contractor assistance, to bulk purchase, testing, and distribution of filter media to all states, local agencies, and tribes for particulate matter monitoring. This service can be conducted as either associated program support or as in-kind assistance.

In providing associated program support, EPA works with regions, tribes, and state and local agencies in advance to identify needs on a national basis and targets funds for the support *before* determining the region-by-region allocation of grant funds. In-kind assistance is agency-specific and the value of the service is included in the grant agreement of a state, tribe, or local agency *after* agency-by-agency allotments are determined. This approach requires the recipient to provide an appropriate amount of matching funds and meet other administrative obligations. For FY 2005, unless otherwise directed by the contributing grantees, national procurement support will again be handled as associated program support.

**Table A-5. Preliminary FY 2005 National Procurement Contract Amounts**

Region	1	2	3	4	5	6	7	8	9	10	Totals
Categories											
S/NMOC Sampling Sites				26,271							26,271
UATMP Sites		146,800		29,264				116,602			292,666
PAMS Q/A Support	10,000	7,489	14,772	28,690	68,588	2,463			125,000		257,002
Carbonyl Monitoring		79,380		93,626	12,000				30,000		215,006
HAP Support		216,050									216,050
PM Filters	6,600	18,442	38,372	59,810	76,312	19,112	25,262	33,086	55,000	27,258	359,254
Totals	16,600	486,161	53,144	238,021	156,900	21,575	25,262	149,688	210,000	27,258	1,366,249

For FY 2005, procurement funds have been set aside from the appropriate pollutant categories (i.e., ozone, PM, toxics sub-objectives, etc.) of each region. The amounts shown for the six areas are based upon responses received from the regions and their state and local agencies to date. Several states have increased their use of the national contract in this manner for FY 2005. These amounts may further change prior to the final FY 2005 grant allocation. For more information on the national procurement contract, contact Vickie Presnell at 919-541-7620 or via email at - [presnell.vickie@epa.gov](mailto:presnell.vickie@epa.gov)

**Speciated and Total Nonmethane Organic Compound Program (SNMOC/NMOC).** The SNMOC/NMOC program has been operating since 1984 to provide data for use in development of control strategies for ozone. EPA provides centralized assistance to state and local agencies in the collection of NMOC, SNMOC, selected toxic compounds, and carbonyl compounds. Participating sites are provided with all necessary sampling equipment, which they may co-locate with NO<sub>x</sub> monitors.

The SNMOC/NMOC program consists of the following base components:

- Base site support for sampling equipment preparation, installation and training, problem solving, and final reporting.
- Canister sample analysis for 79 speciated NMOC or total NMOC.

Options include:

- Analysis for 58 toxic and polar compounds.
- Cartridge sample analysis for 16 carbonyl compounds.
- Concurrent analysis for both toxic and polar compounds, and speciated NMOC at a cost that is significantly reduced compared to performing the two analyses separately.

States collect the samples in canisters and/or cartridges and air freight them to Research

Triangle Park, NC, for analysis. The samples are collected each week day from 6:00 to 9:00 a.m. during the summer (typically June 1 - September 30). In general, 96 samples are collected at each site over the study period. However, additional samples may be purchased.

**Urban Air Toxics Monitoring.** To support emerging needs for information on levels of organic toxic species in ambient air, OAQPS initiated the Urban Air Toxics Monitoring Program (UATMP) in 1988. This program serves as an analytical/technical support program similar to the SNMOC/NMOC program. The major purpose of this program is to support state and local agency efforts to assess the nature and magnitude of various air toxics problems. The program also supports states in implementing the new national ambient monitoring network. Each year, the UATMP program supports collection and analysis of 34 canister samples collected every 12 days for a 12-month period. Additional samples can be purchased. This program continues to be highly successful, with excellent overall data capture (97 percent) and data quality that meets well-designed program goals.

The UATMP consists of the following base components:

- Base site support for sampling equipment preparation, installation and training, problem solving, and final reporting.
- Canister sample analysis for 58 toxic and polar compounds.
- Cartridge sample analysis for 16 carbonyl compounds.

Options include:

- Canister sample analysis for 79 speciated NMOC.
- Concurrent analysis for both toxic and polar compounds and speciated NMOC at a cost that is significantly reduced compared to performing the two analyses separately.

**Carbonyl Monitoring.** Carbonyl sampling and analysis has been part of the monitoring support options that the Agency has provided since 1990. Although carbonyl monitoring support can still be performed simultaneously with other program elements, the independent carbonyl option provides more flexibility for special studies and saturation monitoring programs.

The Carbonyl Monitoring Program support consists of the following base components:

- Base site support for sampling equipment preparation, installation and training, problem solving, and final reporting.
- Cartridge sample analysis for 16 carbonyl compounds.

**PAMS and Toxics.** In response to the 1990 Clean Air Act Amendments, EPA issued enhanced ozone monitoring requirements that require states to establish PAMS as part of their SIPs for ozone non-attainment areas. In addition to obtaining more comprehensive and representative data on ozone and its formation, the enhanced monitoring network is a necessary and desirable adjunct to corroborate and track emissions inventories, provide essential data for the operation of photochemical models, characterize exposure, and establish a firmer base for control strategy development.

The EPA will continue to provide support for this program, but with resources to account for shifts from the current level speciated hydrocarbon (HC) monitoring toward a core set of speciated HCs, as enhanced nitrogen oxide monitoring, data analysis, and toxics monitoring. Included in this program is a full set of items to support Title I enhanced ozone precursor monitoring. The PAMS support items include technical off-site and on-site support (initial equipment set-up, on-site technical assistance, consultation, problem solving, etc.); quality control (QC); and quality assurance (QA) program support (data validation, standards acquisition, and data management support). VOC canister, carbonyl compounds sample and concurrent toxics and speciated hydrocarbon analysis are also available.

The PAMS and toxics technical support program consists of the following base components:

- Technical site support.
- QA/QC support.
- Canister analysis support for PAMS compounds.
- Cartridge sample analysis for 16 carbonyl compounds.
- Concurrent analysis for both toxic and polar compounds and speciated NMOC at a cost that is significantly reduced compared to performing the two analyses separately.

The PAMS automated analysis systems and/or multiple canister collection system purchase and installation are the responsibility of the participant. The amount of support an agency can order for the PAMS technical site support and QA/QC components of the program have been divided into smaller increments so that state and local agencies can order the exact amount of support they require.

**Other Hazardous Air Pollutant Analysis.** The national monitoring support programs have been expanded to provide for the measurement of additional HAPs to support the effective implementation of the CAA and address the needs of other special studies. Analytical services support is provided for samples containing specific HAPs, which are a subset of the 188 compounds listed in the CAA. Participants are responsible for providing all necessary sampling equipment. The analysis among categories is based upon the specific needs of the state or local agency. This support also will assist the states in implementing the new national ambient monitoring network.

**Performance Evaluation (PE) Sample Support.** Agencies that are participating in the NATTS can receive PE samples on an annual basis. These can include VOCs, carbonyls, SVOCs and metals on quartz filters. The PE samples must be generated and analyzed by the national contractor and sent as “blind” samples to the participating agency. If an agency uses the national contractor for analysis, the agency will not be able to use the contractor for PE sample support.

**Particulate Matter Filters.** OAQPS has historically purchased particulate matter filters (for PM10 and total suspended particulate sampling used for metals analysis) and distributed these to state and local agencies across the nation. The economies of scale from this type of centralized purchasing, centralized acceptance testing of filters, and distribution has produced lower costs than if state and local agencies each purchased these filters through their individual agencies.

State and local agencies are responsible for providing information to the regions each year on the numbers and types of filters required prior to shipment.

**Section IV. PRELIMINARY FY 2005 AIR GRANT ALLOCATION** (See next two pages)

April 21, 2004				PRELIMINARY FY 2005 AIR GRANT ALLOCATION								
				Clean Air - Goal 1								
	Category	Ozone	PM	Visibility	NAAQS NO2	Lead	CO	SO2	Air Toxics Characterizn. Implementn.		Acid Rain Assessment	Subtotals by Region
Region												
1	§ 105	7,327,275	1,714,549	37,474	52,085	0	1,284,927	447,450	2,166,098	948,973	0	13,978,831
	§ 103 PM Monitoring		1,873,360									1,873,360
	Subtotal	7,327,275	3,587,909	37,474	52,085	0	1,284,927	447,450	2,166,098	948,973	0	15,852,191
2	§ 105	6,471,475	2,219,714	44,287	292,040	0	1,130,114	865,373	1,184,462	1,470,106	91,898	14,119,966
	§ 103 PM Monitoring		2,019,420									2,019,420
	Subtotal	6,471,475	4,239,134	44,287	292,040	0	1,130,114	865,373	1,184,462	1,470,106	91,898	16,139,386
3	§ 105	8,985,813	2,142,533	38,452	162,168	13,375	1,593,263	779,077	2,101,993	1,719,478	115,275	17,658,065
	§ 103 PM Monitoring		2,984,360									2,984,360
	Subtotal	8,985,813	5,126,893	38,452	162,168	13,375	1,593,263	779,077	2,101,993	1,719,478	115,275	20,642,425
4	§ 105	7,308,924	2,846,347	808,325	786,630	219,001	676,413	976,926	1,793,902	2,519,919	426,944	18,448,428
	§ 103 PM Monitoring		5,931,880									5,931,880
	Subtotal	7,308,924	8,778,227	808,325	786,630	219,001	676,413	976,926	1,793,902	2,519,919	426,944	24,380,308
5	§ 105	11,487,620	3,303,661	482,606	0	148,301	859,641	502,714	4,959,843	2,747,333	706,313	25,207,880
	§ 103 PM Monitoring		5,081,848									5,081,848
	Great Lakes								1,187,100			1,187,100
	Subtotal	11,487,620	8,385,509	482,606	0	148,301	859,641	502,714	6,146,943	2,747,333	706,313	31,476,828
6	§ 105	7,699,046	1,795,971	148,263	236,572	50,402	1,072,907	520,814	1,737,665	1,275,784	55,096	14,595,643
	§ 103 PM Monitoring		3,075,460									3,075,460
	U.S-Mexico Border		1,361,350									1,361,350
	Subtotal	7,699,046	6,232,781	148,263	236,572	50,402	1,072,907	520,814	1,737,665	1,275,784	55,096	19,032,453
7	§ 105	1,468,347	1,074,403	452,514	258,095	175,359	113,152	703,569	661,214	555,425	0	5,487,247
	§ 103 PM Monitoring		1,766,760									1,766,760
	Subtotal	1,468,347	2,841,163	452,514	258,095	175,359	113,152	703,569	661,214	555,425	0	7,254,007
8	§ 105	1,212,867	2,467,906	1,649,460	48,075	67,916	724,204	890,340	398,196	516,683	0	7,976,016
	§ 103 PM Monitoring		1,807,980									1,807,980
	Subtotal	1,212,867	4,275,886	1,649,460	48,075	67,916	724,204	890,340	398,196	516,683	0	9,783,996
9	§ 105	13,064,071	4,012,385	65,246	204,402	22,711	4,315,206	522,301	3,406,683	1,146,559	176,142	26,935,705
	§ 103 PM Monitoring		3,557,086									3,557,086
	U.S-Mexico Border		1,361,350									1,361,350
	W. Reg'l Air Partners hip		150,000									150,000
	Subtotal	13,064,071	9,080,821	65,246	204,402	22,711	4,315,206	522,301	3,406,683	1,146,559	176,142	32,004,141



April 21, 2004				PRELIMINARY FY 2005 AIR GRANT ALLOCATION								
					Clean Air - Goal 1							
	Category	Ozone	PM	Visibility	NAQS NO2	Lead	CO	SO2	Air Toxics Charactrzn.	Implementn.	Acid Rain Assessment	Subtotals by Region
Region												
10 § 105		1,363,931	2,187,750	1,042,466	185,422	56,396	1,793,554	134,153	1,137,313	657,095	0	8,558,080
§ 103 PM Monitoring			1,838,750									1,838,750
Subtotal		1,363,931	4,026,500	1,042,466	185,422	56,396	1,793,554	134,153	1,137,313	657,095	0	10,396,830
Regional Subtotals												
§ 105 Continuing Program		66,389,368	23,765,220	4,769,093	2,225,489	753,461	13,563,381	6,342,718	19,547,369	13,557,355	1,571,668	152,485,122
§ 103 PM Monitoring			29,936,904									29,936,904
Natl Geog. Initiatives			2,872,700						1,187,100			4,059,800
Subtotal by Category		66,389,368	56,574,824	4,769,093	2,225,489	753,461	13,563,381	6,342,718	20,734,469	13,557,355	1,571,668	186,481,826
HQ - Associated Program Support												
Natl Procure. Support		283,273	359,254						723,722			1,366,249
§ 103 PM Monitoring			12,563,096									12,563,096
NOx Trading Systems		2,647,657										2,647,657
Subtotal		2,930,930	12,922,350						723,722			16,577,002
HQ - Direct Implementation												
IMPROVE				1,247,233								1,247,233
Subtotal				1,247,233								1,247,233
HQ - Undistributed												
Reg'l Haze Planning Orgs.				10,000,000								10,000,000
NE O3 Transport Comm.		648,560										648,560
STAPPA-ALAPCO		1,246,597										1,246,597
§ 103 Air Tox. Mon. Network									10,000,000			10,000,000
CAA Training		600,000	600,000						600,000			1,800,000
Mobile Source Outreach		548,782										548,782
Subtotal		2,984,578	600,000	10,000,000					10,600,000			24,243,939
Total by PRC		72,364,237	70,097,174	16,016,326	2,225,489	753,461	13,563,381	6,342,718	32,058,191	13,557,355	1,571,668	228,550,000
Notes:												
	Reflects adjustments for NOx Trading System, S/A, and National Procurement Contract											
	Tribe-only and SIRC funds are not shown.											
	Details on competitive funding for the Clean School Bus USA program are still being developed.											
	Allocations of funds under section 103 for air toxics monitoring network development are still being developed.											

## **Section V. STATE INDOOR RADON PROGRAM**

The State Indoor Radon Grant (SIRG) Program distributes grants authorized under section 306 of TSCA. The objectives of the SIRG program are articulated in EPA's SIRG Program Specific Technical Guidance, issued in May 1997. The guidance is currently under revision and will be available for comment in April 2004 with final guidance expected in 2005. However, the program objectives and priorities are not expected to change significantly. Recipients are encouraged to design and implement programs that: (a) focus on the most effective approaches to reduce the risk of exposure to unhealthy levels of indoor radon, (b) articulate measurable risk reduction targets, and (c) achieve quantifiable environmental results.

Use of FY 2005 SIRG grants should focus on achieving quantifiable results in the following radon program priority areas:

- Getting new homes built radon-resistant.
- Obtaining disclosure, testing, and mitigation in conjunction with transfers of real estate.
- Developing coalitions that work with local governments, partner affiliates, and other radon risk reduction leaders.
- Getting testing and, where necessary, mitigation in schools.
- Setting targets for environmental results in four areas: testing, mitigation, radon resistant new homes, and awareness activity (optional).
- Innovative activities that achieve measurable results in radon awareness, testing, mitigation, and radon resistant new construction.

In FY 2005, SIRG funds also may be used for activities related to the development of multimedia mitigation (MMM) plans under the Safe Drinking Water Act to address radon in indoor air. States electing to implement MMM programs will be required to submit their MMM plans to EPA within two years of publication of the final rule. SIRG funds may be used for activities specifically related to the development of MMM plans, including activities related to ensuring public participation and input in the development of MMM plans.

The SIRG program priorities, measures of performance, reporting requirements, and the allocation methodology are closely aligned to reinforce achievement of environmental results. Population, smoking rates, and geologic potential for elevated radon (exposure and risk parameters) are the principal bases for allocating 80 percent of available SIRG funds. The remaining 20 percent is being awarded on the basis of progress in achieving results in the radon program priority areas listed above.

In consultation with EPA regional SIRG offices, the SIRG National Program completed the process of reviewing and updating the underlying state and tribal demographics, past awards, and projected award requests that are used for allocation of SIRG resources. As a guiding principle, the SIRG National Program established a national regional allocation for tribes to emphasize the importance of tribal radon programs.

While the purpose of the allocation is to determine the appropriate amount per region based

upon state and tribal population, risk, and past and projected awards and results, the regions still have the flexibility to determine the actual award to each state and tribe. Each region's allocation includes funds for tribes with existing agreements, and those that anticipate forming new agreements.

More details on how the allocation was generated on a region-by-region basis are available from Charles Gasque (202-343-9117) in the Office of Radiation and Indoor Air.

Table A-6. FY 2005 State Indoor Radon Grant Allocation

PRELIMINARY FY 2005 SIRG ALLOCATION	
As of 3/9/04	
State Indoor Radon Program	
New PRC Designation	
102A05E	
Region	
1	842,082
2	732,850
3	792,351
4	1,458,902
5	1,834,626
6	393,662
7	722,501
8	592,500
9	565,600
10	<u>214,926</u>
Total	\$8,150,000

## **Appendix B**

### **National Air Toxics Monitoring Program FY 2005 State and Local Agency Grant Guidance and Allocation**

**April 7, 2004**

#### **I. Introduction**

The President's budget request for FY 2005 includes additional grant resources to continue monitoring for hazardous air pollutants across the country. This allocation is consistent with directions from the Congress and subsequent recommendations from the Science Advisory Board (SAB). The SAB has concluded that an understanding of air toxics in the environment is important and that additional resources would aid in efforts to assess air toxics concentrations and improve the scientific basis for understanding exposure to these chemicals and their resulting health risks. In addition, the Office of Management and Budget's evaluation of the Agency's air toxics program identified several areas that expanded monitoring could aid, including closing large data gaps on toxicity and contributing to the determination of actual population exposure. The expansion also is consistent with the Agency's National Air Toxics Implementation Strategy, and National Ambient Monitoring and Air Toxics Monitoring Strategies.

This document presents EPA's FY 2005 technical and grant guidance for key aspects of the national air toxics ambient monitoring program. This information is intended as a planning and guidance tool for EPA Regional Offices and for state, local and tribal air agencies. The guidance reflects input and recommendations from the Joint Air Toxics Monitoring Committee, a sub-group of the Standing Air Monitoring Workgroup. The Workgroup is comprised of EPA, state, interstate, and local agency representatives. This year's guidance builds upon air toxics monitoring and data analysis work from the past four years. Related information from these efforts, which helps support and clarify this guidance, is listed below.<sup>2</sup> EPA's Air Toxics Monitoring Strategy<sup>2</sup> is particularly important.

The national air toxics monitoring program is being implemented in conjunction with the development of both the Agency's Air Toxics Strategy and its National Air Monitoring Strategy. One of the major components of the Agency's air toxics strategy is the national air toxics assessment (NATA). The goal of the NATA is to identify those air toxics that are of greatest

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<sup>2</sup> See - "Air Toxics Monitoring Concept Paper, Draft February 2000 found at <http://www.epa.gov/ttn/amtic/files/ambient/airtox/cncp-sab.pdf>; see also "Air Toxics Monitoring Data: Analyses and Network Design Recommendations," Spring, 2003, prepared by Battelle Memorial Institute and Sonoma Technology, Inc.; and also "FY 2002 Air Toxics Monitoring Grant Guidance," March 1, 2002; and "FY 2003 Air Toxics Monitoring Grant Guidance," March 12, 2003. Additional background information can be found at: <http://www.epa.gov/ttn/amtic/airtxfil.html> and <http://www.ladco.org/toxics/toxics.htm>.

<sup>2</sup>See the draft Air Toxics Monitoring Strategy (final due summer 2004) found at <http://www.epa.gov/ttn/amtic/airtxfil.html>

potential risk to the population. The assessment includes compilation of a national emissions inventory of air toxics emissions from outdoor sources, estimating population exposures across the contiguous United States, and characterizing potential public health risks due to inhalation of air toxics, including both cancer and non-cancer effects.

One of the building blocks of the assessment is the estimation and determination of ambient concentrations of air toxics across the contiguous United States. This guidance addresses key aspects of that effort - the implementation of all phases of a national air toxics monitoring trends network for pervasive air toxics and the expansion of local-scale monitoring to help characterize localized air toxics. These efforts will aid decision makers at both the state and national level in assessing and validating NATA activities by comparing monitored values with modeled data. The local-scale monitoring will also provide insight into the effectiveness of community air toxics reduction projects by enabling pre- and post-project monitoring at project sites.

The national air toxics monitoring program is also carrying out two dominant principles that emerged from the National Air Monitoring Strategy<sup>3</sup> and that provide a framework for the air toxics monitoring efforts. The first principle is that monitoring programs must have an appropriate balance between national prescriptive measurements (e.g., projects in the National Air Toxics Trends Stations, or NATTS) and more flexibility to address local issues that are not adequately handled through a national design, given the diversity of toxics issues across the nation. The balance between NATTS and the emerging local scale assessments reflects adherence to this principle.

Second, the national strategy is directing a movement toward multiple measurements across numerous pollutant groups, recognizing the fact that most air pollution issues are interrelated from a scientific perspective and that enormous economies of scale can be realized from integrating program management efforts. To facilitate this movement, the NATTS are required to be located at existing PM-2.5 speciation trend sites, some of which are also located at Photochemical Assessment Monitoring Stations (PAMS). This coordination provides a spectrum of multiple pollutant measurements across toxics, particles, and ozone and a synergistic increase in the interpretive value of data delivered for state implementation plan (SIP) development and for tracking the success of air pollution management efforts.

## **II. Grant Funding**

For FY 2005, approximately \$16.5 million in State and Tribal Assistance Grant (STAG) funds under Clean Air Act sections 105 and 103 are expected to be appropriated to support national air toxics monitoring activities. This includes \$6.5 million under section 105 to continue support for ongoing air toxics monitoring activities initiated and conducted by state and local air quality agencies and \$9.95 million under section 103 authority to support the development and operation of the national air toxics assessment and trends network and expanded local-scale air toxics monitoring.

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<sup>3</sup>The draft National Ambient Air Monitoring Strategy document can be found at <http://www.epa.gov/ttn/amtic/monstratdoc.html> This document and associated implementation plan will be final summer 2004.

Beginning in FY 2003, \$6.5 million in section 105 funds was redirected from the implementation of the national ambient air quality standards in recognition of expanded air toxics monitoring being conducted by state and local air agencies.<sup>4</sup> Initially estimated at 300 sites, current estimates are that at least twice as many such efforts are underway across the country. The contribution of these efforts to the NATA, and their relationship to the localized monitoring being proposed for section 103 funding under this guidance, is further discussed below.

The primary focus of this guidance is on that portion of the air toxics monitoring efforts funded under section 103 authority. This includes support for the NATTS network, associated quality assurance and data analysis needs, and funding for multiple local-scale characterization projects. The latter are to be selected on a competitive basis using specific criteria outlined in later guidance. The first round of this process was performed in fy2004, with proposals that were due March 31, 2004.

NATTS is an ongoing, 22-site network that will continue to receive maintenance and quality assurance funding. This network may increase as input from the health community is received, and revisions to the overall ambient monitoring network are made (refer to footnote 3.) NATTS monitoring resources total \$3,255,000. Supporting quality assurance and data analysis total \$745,000. An additional \$5.946 million in funding will be allocated to support a number of local scale characterization projects, with data collection activities designed to answer questions satisfying both the national need and the local need.

Local scale project studies represent a very broad group of projects that clearly are delineated from NATTS as they are of short duration (typically less than two years) and are not required to measure NATTS parameters. The intention of these projects is to provide a localized component to the national program, with the flexibility to address issues beyond the scope of the NATTS. Whereas the NATTS are best identified with the trends and accountability objectives, local scale projects are more oriented toward addressing problem identification, and better suited for model evaluation support, assuming the projects offer more detailed spatial coverage than a single NATTS. Since these projects are expected to be of short term, they may be rotated over the years to different locations. Their role in program accountability is largely one of establishing a baseline characterization of a community's air quality that is well matched to an associated emissions mitigation approach. Clearly, there is an expectation that following the initial period of these community studies, provisions will be made to either extend a critical subset of monitoring tasks, or revisit an area at a later date to assess the impact of a particular program.

What kinds of community monitoring studies are expected? Admittedly, there is no single clear way to articulate what a local scale project study is, given the decision to avoid redundancy

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<sup>4</sup>**State and Local Air Quality Management Program, Office of Air and Radiation Guidance, "Status"** section. OAR will continue to target significant resources to develop, implement, and refine ambient air monitoring networks nationwide pursuant to a revised National Air Monitoring Strategy. Funds are provided under section 103 for visibility and haze (IMPROVE - \$1.25 million), fine particulates (\$42.5 million), and air toxics (NATTS and community-based monitoring - \$10 million); and under section 105 for ongoing state and local air toxics monitoring (\$6.5 million) and ozone (PAMS - \$14 million). EPA will be working with state, local, and tribal agencies to reexamine the most effective use and distribution of these resources pursuant to the revised National Air Monitoring Strategy.

and create a variety of assessments that allow for probing into the myriad of local/urban scale problems. A competitive proposal process will be used to solicit the best ideas from agencies and Tribes that are well connected to problems that require attention.

The EPA, State, Local, and Tribal agencies (S/L/T's) will use these studies to develop a much broader understanding and confirmation of the HAPs issues facing communities across the country. It is expected that by 2010, both the local scale program and the NATTS will provide comprehensive data for effective risk assessment and reduction strategies.

### III. Funding Parameters

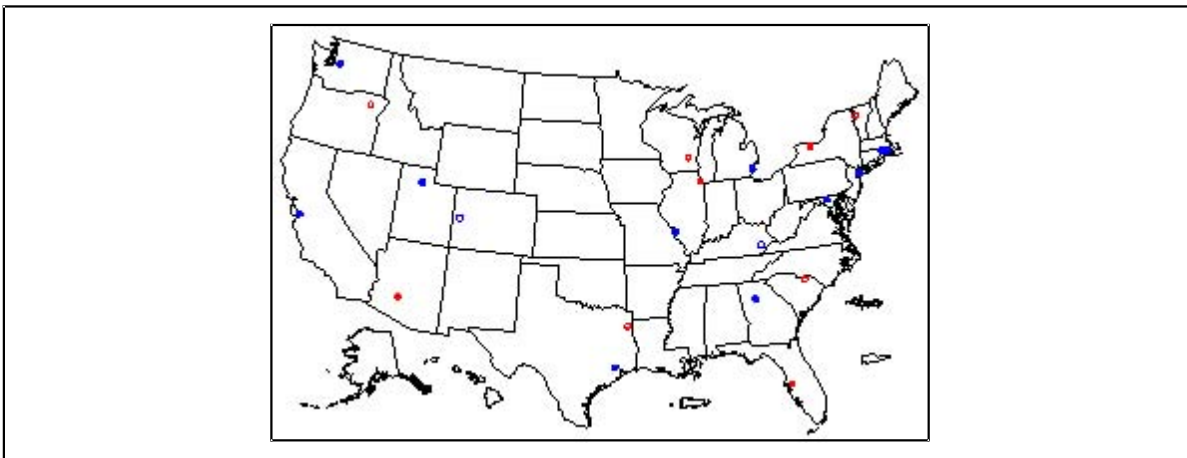
All NATTS projects and associated program support activities are exempt from competition as outlined in EPA Order 5700.5. The applicable exemption is that which addresses the National Air Toxics Monitoring Pilots and is found under section 6(b)(1) of the order. The full text of the Competition Order may be found at: [http://www.epa.gov/air/grants\\_funding.htm](http://www.epa.gov/air/grants_funding.htm). The localized projects are not exempt from competition, however. Technical guidance for these projects will be posted in the fall of 2004 and rules to apply for these funds will be contained in a companion request for applications (RFA) document.

### IV. Projected Activities and Project Purposes (for Section 103 Funds)

The grant funds are expected to support the following activities during FY 2004:

- Continuation of Initial Trends Sites. An important objective of the national network is to establish trends and evaluate the effectiveness of hazardous air pollutant (HAP) reduction strategies. To this end, funding for air toxics monitoring at 22 NATTS sites was released during FY 2002 and FY 2003. These sites, to be in full operation by January 2004, are:

<i>Region</i>	<i>Urban</i>	<i>Rural</i>
I	E. Providence, RI Boston (Roxbury), MA	Chittenden County VT
II	New York, NY Rochester, NY	
III	Washington, DC	
IV	Decatur, GA Tampa FL	Hazard, KY Chesterfield, SC
V	Detroit, MI Chicago IL	Mayville WI
VI	Houston (Deer Park), TX	Harrison County, TX
VII	St. Louis, MO	
VIII	Bountiful, UT	Grand Junction, CO
IX	San Jose, CA Phoenix AZ	
X	Seattle, WA	La Grande, OR



**Figure 1. Map of 22 Trends Sites**  
(Blue = urban, Red = rural)

The FY 2004 grant guidance notes that “(c) continuation of the trends sites beyond this 12-month period is expected, although the funds for this additional monitoring will need to be addressed with next year’s funding allocation.” The allocation of \$2,685,000 (\$220,000 per site) in FY 2005 is necessary to maintain all 22 trends sites. The trends sites are expected to comply with the quality assurance activities, including participation with the Agency’s Performance Evaluation and Round Robin sampling program. Trend measurements are listed in Section IV below.

Hexavalent chromium, rather than total chromium, is of interest given U.S. EPA’s cancer risk numbers and experience from the pilot city program. Monitoring for this pollutant was funded with FY 2004 funds to begin no later than January 2005. Funding is again granted with this guidance, for monitoring to begin no later than January 2006.

Set aside funding of \$570,000 is being allocated for contingencies related to operation and maintenance, cost of additional equipment, or further testing of special instrumentation. (Please refer to test monitoring allocations made in the FY 2004 State and Local Agency Grant Guidance and Allocation, dated August, 2003.)

Please note grantees are expected to input their quarterly monitoring data into the Air Quality System (AQS) and supply an air toxics emission inventory as grant conditions for this funding. *Funding will be disallowed if these grant conditions are not met.*

## **Allocation**

- Data analysis projects: Funding is allocated for data analysis of air quality data from the 22 NATTS sites, (especially, programs funded in total or part with Air Toxics Monitoring Program grant monies from a previous year), local-scale projects data from other urban or regional programs, and other quality assured, valid air toxics data submitted to AQS. Quality assured data sets are the highest priority, but all data should be included for analysis and flagged with the appropriate quality assurance caveats. These analyses will consist of trends analyses (for data sets with a sufficient number of years of quality assured, valid data), model to monitor comparisons, source apportionment, possible risk



exposure studies, and general characterization analyses. These analyses should supplement (and not duplicate) other trends and characterization analyses being performed such as EPA's 'Trends Report' found at: <http://www.epa.gov/airtrends/toxic3.html>, and LADCO's 2003 and 2004 air toxics characterization studies found at: <http://www.ladco.org>. This work will build on and complement, previous data analyses. Data analysis is always done with previous years monitored data: thus funding under this guidance document will yield a final data analysis report covering the first 3 years of the NATTS program (January 2003 through December 2005). Complete data sets will be available for analysis starting in April 2006 in AQS.

In addition, these funds will also cover the sponsoring of a data analysis workshop for all interested parties to attend (up to 100 attendees) in the spring of 2005. A data analysis workshop is held every spring which covers efforts from previous years' monitoring. To accommodate discussion of the 3 year data set however, the workshop in 2006 may be delayed until the fall so that all data can be downloaded from AQS and analyzed. The following table may help provide clarity on this concept:

Actual data analysis	Funding mechanism for data analysis	Results reported at data analysis workshop	Funding mechanism for the data analysis workshop
Covering historical and pilot data sets, pre 2003.	fy2003 grant guidance dated March 12, 2003	June 2004	fy2004 grant guidance dated August 15, 2003
Covering NATTS monitoring years 2003/2004 and all other appropriate data.	fy2004 grant guidance dated August 15, 2003	June 2005	fy2005 grant guidance
Covering NATTS monitoring years 2003-2005 and all other appropriate data.	fy2005 grant guidance dated April 1, 2004	September 2006	fy2006 grant guidance

- Quality Assurance. Three main elements of the quality assurance program are funded: annual data assessment, performance evaluations/ round robin, and technical systems audits. This program was initiated in fy2004 and will be an ongoing part of the NATTS. Technical system audits will be performed on each NATTS site bi-yearly. Performance evaluation audits will be performed twice yearly. Refer to the Air Toxics Monitoring Strategy, Section 4.2, for discussion of these items -- <http://www.epa.gov/ttn/amtic/airtxfil.html>

- Local Scale Assessments. As noted earlier, all NATTS projects and associated program support activities are exempt from competition as outlined in EPA Order 5700.5 under section 6b.(1) which addresses the original National Air Toxics Monitoring Pilots. All other assessment projects are not exempt. The criteria for these projects is being revised, thus no assumptions should be made that the fy2004 criteria listed at the web site below

will be intact for fy2005 funding. Both the criteria and project objectives will be detailed in a guidance package and companion request for applications (RFA) in the fall of 2004. Posting of the RFA will occur no later than December 2004 at: [http://www.epa.gov/air/grants\\_funding.html](http://www.epa.gov/air/grants_funding.html). Once posted, applicants will have 60 days to prepare and submit an application.

## V. NATTS Requirements

Grantees participating in this program are requested to follow certain guidelines that will aid in a consistent data base for long-term data analysis and air toxics characterization. A sampling frequency of 1/6 over a 6-year period has been established to ascertain long-term trends. Please note the following table which lists NATTS requirements to be addressed in each grant application:

NATTS Parameter	Date Due	Comments
Quality Assurance Plan for the NATTS sites	Due to Regions September 2005	A re-submit of the NATTS QA plans from previous year with any updates is acceptable.
Measured pollutants: benzene carbon tetrachloride chloroform 1,3-butadiene 1,2-dichloropropane: (propylene dichloride) methylene chloride tetrachloroethylene: (perchloroethylene, PCE) trichloroethylene, TCE vinyl chloride arsenic and compounds beryllium and compounds cadmium and compounds Hexavalent chromium lead and compounds manganese and compounds nickel and compounds acetaldehyde formaldehyde acrolein	All data to be reported to AQS quarterly – January, April, July, October - for previous quarters, 90 days after the end of each quarter.	NOTE- Special emphasis on quality assurance and completeness is required for the six following compounds:  Hexavalent chromium Benzene Formaldehyde Acrolein Arsenic 1,3-Butadiene   mercury monitoring disallowed
Methods IO-3, TO-15, and TO-11A		These are available on AMTIC: <a href="http://www.epa.gov/ttn/amtic/">http://www.epa.gov/ttn/amtic/</a>
QA budget not less than 10% of total expenditures – co-location not less than 10% of sampling.		Co-location sampling can be from monitors in close proximity to a site – please give details in grant application.

PM10 federal reference method to be followed	Please reference EPA QA handbook Volume II Section 2.11 for operation and procurement: <a href="http://www.epa.gov/ttn/amtic/files/ambient/qaqc/2-11meth.pdf">http://www.epa.gov/ttn/amtic/files/ambient/qaqc/2-11meth.pdf</a>	
Each NATTS site to have a PM2.5 speciation monitor. Each urban NATTS site to also have an aethalometer.	AQS quarterly reporting.	These instrument requirements do not apply to local scale projects.
Each site encouraged to follow Technical Assistance Document (TAD) for NATTS		TAD will be available at: <a href="http://www.epa.gov/ttn/amtic/files/ambient/airtox/nattsdra.pdf">http://www.epa.gov/ttn/amtic/files/ambient/airtox/nattsdra.pdf</a>
National Toxics Inventory (NTI) Emission Inventory: a 2002, 2005 and 2008 EI due in conjunction with NTI due dates.	A complete emission inventory required for each study area. Refer to the Emission Inventory Regional Representative for guidance, "complete area" definitions, and NTI due dates.	Additional QA requirements
The Quality Management Plan for the National Air Toxics Trends Stations Monitoring Program December 2002, (QMP), EPA 454/R-02-006.	The QMP should be referenced so that all agencies (EPA, Regional offices, State and local agencies) understand their roles and what assessments will be performed on the trends network.	

Methods. The NATTS network is following a performance based method system, and thus all data collected must meet the data quality indicators delineated in the US EPA Technical Assistance Document. This document can be found in final form late 2004 at <http://www.epa.gov/ttn/amtic/airtxfil.html>

Please note that continuation of the trends sites beyond this 12-month period is expected, although the funds for this additional monitoring will need to be addressed with next year's funding allocation. It should be understood, however, that these sites are not necessarily intended to be operated indefinitely. On-going analysis of the data will be conducted to assess continued operation of the sites. If a given site is determined to be no longer useful for trends (or other) purposes, then it may be discontinued or relocated. Also note that the local-scale studies are one year studies and may or may not be funded in subsequent years.

## VI. Budget Summary

The allocation ranges for this funding year are as follows:

\$2,685,000	Continue 22 NATTS sites at \$122,000 per site, including maintenance of the Chrome VI Collection system (modified California method)
570,000	Set-aside funding for instrument/method/operation and maintenance contingencies.
400,000	Associated program support for NATTS Quality Assurance including quarterly PE/round-robin samples, technical systems audits, and an annual data quality assessment.
335,000	Associated program support in the form of a national contract for data analysis.
10,000	Funding for a data analysis workshop covering previous data analysis work (Workshop will cover results from the 2003/2004 monitoring year and be held spring of 2005)
5,946,000	Local scale projects. Guidance for these funds to be released fall 2004.
<hr/> <b>\$ 9,946,000</b>	<b>TOTAL ALLOCATION</b> (reflects .0054 yearly recision on STAG grants)

## VII. Schedule of Activities

2002 Emission Inventories due for NATTS areas	June 2004
Local scale project guidance issued	Fall 2004
NATTS agencies submit grant applications	April 2005
Work plans approved/grant allocation	June 2005
Data analysis workshop	Spring 2005
QA plans approved	September 2005
NATTS monitoring begins -this allocation	January 2006
All data into AQS	Quarterly, starting 90 days after 1 <sup>st</sup> quarter of measurements.
Data analysis contract (Including monitored results for January 2003 through December 2005)	October 2005 start date

## **VIII. Effective Grants Management**

Regional Offices and recipients are reminded to follow Agency and Office of Air and Radiation requirements for the sound management of grants awarded under this program. This includes making an award based upon the appropriate authority, purpose and eligible recipient<sup>5</sup>; promoting competition, where appropriate (e.g., the local-scale monitoring portion of this program)<sup>6</sup>; ensuring effective oversight<sup>7</sup>; and identifying specific environmental and/or programmatic results to be achieved with the resources provided.<sup>8</sup>

## **IX. For Further Information**

For further information on this guidance please contact Sharon Nizich at 1-919-541-2825 or by email at ([nizich.sharon@epa.gov](mailto:nizich.sharon@epa.gov))

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<sup>5</sup> See “Guidance for Funding Air and Radiation Activities Using the STAG Appropriation,” R. Brenner to Regional Air Division Directors; November 12, 1999.

<sup>6</sup> See EPA Order 5700.5, “Policy for Competition in Assistance Agreements,” September 12, 2002 at: <http://www.epa.gov/ogd/grants/competition.htm>.

<sup>7</sup> See EPA Office of Grants and Debarment, Appendix S - EPA Policy 5700.6, “Policy on Compliance, Review and Monitoring,” December 31, 2002.

<sup>8</sup> See “FY 2004 Grant Guidance for Selected Air and Radiation Programs and Preliminary Grant Allocation,” at <http://www.epa.gov/ocfopage/npmguidance/index.htm>.

## Appendix C - Regional Strategy Examples

Region 1 – Boston Breathes Better Pilot Transportation Project. Region 1 and OAR's Office of Transportation and Air Quality are leading a pilot project designed to reduce air pollution and air toxics from transportation sources in Boston. One of the goals of the pilot project is to increase participation in EPA's national voluntary transportation programs. This pilot could also explore how a state might build these voluntary programs into its SIP and possibly serve as a national model for how to implement a community-based voluntary transportation program. Boston is well positioned to be a national model for such an effort. As in many other urban areas, air pollution is a persistent problem in Boston. Fortunately, existing regulatory and non-regulatory programs in the state already underway provide a strong foundation from which to build an integrated pilot. In addition, many governmental organizations, businesses and environmental groups in Boston are strongly committed to finding innovative ways to reduce air pollution from transportation sources. EPA is forming a steering committee with representatives from business, environmental, health and environmental justice organizations, as well as state and local government agencies, to help shape the pilot and identify potential participants from the business community to participate.

Region 2 – Asthma Partnerships. Children's health is a particular focus of Region 2's activities to achieve Goal 1. Towards this end, the Region has been an active participant in the efforts of the Pediatric/Adult Asthma Coalition (PAC) of New Jersey – serving as a member of the steering committee and various issue committees (including schools and environment). PAC is a statewide coalition comprised of organizations across NJ representing all sides of the asthma issue. The Coalition has the state lead on asthma strategic planning and implementation issues to address asthma in the home, in schools, through medical providers, the insurance industry, and through supporting statewide policy initiatives. Region 2 is also actively working with a number of organizations in Puerto Rico to address the Commonwealth's high incidence of asthma. Proyecto AIRE is a collaborative effort between Region 2, The University of Puerto Rico College of Allied Health Programs, Metropolitan University, the PR Department of Health, and Colores de Asthma, the asthma coalition. Proyecto AIRE is designed to educate asthmatic children and their parents about proper disease management and eliminating environmental triggers in the home and school setting. Although only three years old, this partnership has already resulted in the training of 100 asthma outreach educators who, in turn, have provided information to the communities to educate asthmatics about their disease and its proper management.

Region 3 – Community-based Air Toxics Initiative. Region 3 is invested in a major community-based air toxics initiative – the Philadelphia Air Toxics Risk Reduction Project. Region 3 and Philadelphia Air Management Services are partners in this project. The population in Philadelphia, the project's area of concern, faces a much higher than average risk of developing cancer and other disease as a result of exposure to air toxics, according to the NATA. The project will address the air toxics concern in Philadelphia by: 1) encouraging owners of diesel powered trucks, buses, etc., in Philadelphia to voluntarily retrofit their vehicles with emission controls and to use ultra-low sulfur fuel oil, as well as by encouraging other voluntary efforts in Philadelphia that will result in air toxics emissions reductions; 2) assessing needed future air toxics controls in Philadelphia by conducting a detailed study of air toxics sources, concentrations, exposure, and risk; and 3) informing the public in Philadelphia of actions they

can take to help reduce air toxics emissions and to reduce their exposure to air toxics. The project will focus on the air toxics identified by NATA as presenting the greatest health risks in Philadelphia.

Region 4 – Multi-media Urban Growth Strategy. Rapid population growth throughout the Southeast has become a significant issue in Region 4. This growth and the associated changes in land use are creating newer, more complex multi-media environmental challenges. Region 4 is focusing on ways to provide resources, tools, and assistance to communities that are struggling with overwhelming growth as well as those that are trying to attract growth in a positive manner. Air, water, and land issues related to this growth are rapidly becoming the top priorities – not only at the State and local level – they are also becoming priorities for our partner Federal Agencies and our own media programs. Through the use of a comprehensive partnership strategy, informed by the best environmental information, the Region will be working to address these challenges.

Region 5 – Great Lakes Binational Toxics Strategy. The Great Lakes Binational Toxics Strategy was signed by Canada and the U.S. in 1997 and represents the most comprehensive effort by the two countries to achieve a mutually agreed-to commitment to virtually eliminating persistent toxic substances from the Great Lakes environment. The Strategy brings together Environment Canada (EC), the U.S. EPA, and industries, environmental and community groups on both sides of the border, in a wide range of action-oriented measures for addressing substances that EC and EPA have identified as having “immediate priority” for virtual elimination. These substances include mercury, PCBs, dioxin and furans, hexachlorobenzene and benzo(a)pyrene, octachlorostyrene, five cancelled pesticides including aldrin/dieldrin, chlordane, DDT, mirex and toxaphene, and alkyl-lead. Substance-specific workgroups established under the Strategy work to eliminate these substances from the Great Lakes Basin. These efforts build upon the ongoing work of existing Great Lakes programs on both sides of the border.

Region 6 – Ozone Early Action Compacts. The development of “early action compacts” was an innovation crafted by the Texas Commission on Environmental Quality in cooperation with EPA Region 6 and members of the environmental community. An Early Action Compact (EAC) allows a region to submit an enforceable State Implementation Plan outlining steps the region will take to maintain compliance with the ozone standard. In return, the EPA will defer any potential nonattainment designation and give the area until 2007 to demonstrate attainment of the standard. EACs provide a means for local governments to develop their own initiatives to get clean air as soon as possible and meet the ozone standard – before they would have to do so under EPA's schedule. Communities close to or exceeding the 8-hour ozone standard that have elected to enter into an EAC will start reducing air pollution at least two years sooner than required by the Clean Air Act. Communities participating in the EACs must submit plans for meeting the national 8-hour ozone air quality standard in 2004, rather than waiting until 2007 (the deadline for other areas not meeting the 8-hour ozone standard). EACs require communities to: develop and implement air pollution control strategies, account for emissions growth, and achieve and maintain the national 8-hour ozone standard. EPA designated these areas “nonattainment” in April 2004. However, as long as EAC areas meet agreed-upon milestones, the impact of nonattainment designation for the 8-hour ozone standard will be deferred. As of March 12, 2004, 38 communities in 14 states had chosen the EAC approach first pioneered by the State of Texas and Region 6. For more information visit

Region 7 – Sensitive Populations. One of Region 7's priority theme areas is sensitive populations. The focus is to measurably reduce the environmental health risks to children, older adults, and people with chronic illnesses. Working in partnership with state, tribal and local governments as well as citizen groups and not-for-profit agencies, Region 7 is developing multi-program and multi-agency approaches to address the areas of concern. Most regional indoor and outdoor air program activities strongly support the Sensitive Populations theme, through work on ambient air quality (smog, PM, lead) and indoor air (asthma, Tools for Schools). Through an interagency agreement with HHS, the Region compares environmental air pollutants with asthma prevalence rates in Missouri and other Region 7 states as time and funding allow.

Region 8 – Energy Strategy. Region 8's six states and 27 tribal nations collectively contain extensive fossil fuel and renewable energy resources – so extensive that the Region is in many ways the center of the nation's energy future. With the current emphasis on resource extraction and electricity production to meet growing demand and foster national security, energy projects in Region 8 are increasing. More mines and wells are being developed, more power plants are being built, and more pipelines and transmission lines are being constructed. Specific objectives for protecting the environment from the potential impacts of energy development and production include making sure that air quality and visibility are not degraded by power plant emissions; rivers, drinking water sources and ground water are protected from polluted runoff and wastes; and ecosystems and wetlands are preserved as infrastructure expands. Strengthening partnerships is also critical. Region 8 is engaged with federal agencies and states through the Rocky Mountain Energy Council – a coordinated effort to increase efficiencies in the review and permitting of energy activities. These partnerships will maximize resources and expedite and ensure environmentally-protective development. Promoting energy efficiency and renewable energy resources are important components of the Region's strategy. Many areas are beginning to tap vast wind-energy potential through the construction of wind turbines and transmission lines. The Region is encouraging these types of projects by incorporating them into enforcement settlements and by sharing information and technical assistance with partners.

Region 9 – San Joaquin Valley Federal Dairy Waste Initiative. Region 9 is implementing a multi-media approach to address the environmental issues associated with CAFOs. Dairy manure contains nutrients, salts, bacteria, and organic matter that can create environmental problems when they enter rivers, streams, or groundwater. Decomposing manure also emits air pollutants, including volatile organic compounds (precursors to the formation of both PM 2.5 and ozone), particulates, ammonia, methane, and odors. Region 9 is supporting the states in implementing the federal CAFO rule, and working with California dairy operators, the University of California at Davis, and the state in the voluntary California Dairy Quality Assurance Partnership. In addition to developing and implementing TMDLs in targeted areas and targeting compliance assurance actions, Region 9 is undertaking the San Joaquin Valley Federal Dairy Waste Initiative. This is a coordinated effort to build upon - not duplicate - existing dairy manure management and treatment programs, by providing federal funds, vision, and support to initiate new projects appropriate to the area. Members of the coalition include EPA Region 9, USDA Rural Development, USDA Natural Resources Conservation Service, and the US Department of Energy Seattle Office. Region 9 believes that addressing dairy manure management issues on a community or regional basis will create or enable opportunities that may



not be available to producers individually. Projects that this Initiative may support are: utilization of manure in biomass plants to generate energy; plumbing dairies into existing human sewage treatment plants; hauling and redistributing manure; and co-composting dairy manure with urban green waste. For more information on these and other Region 9 efforts concerning animal waste management, visit [http://www.epa.gov/region09/cross\\_pr/animalwaste/index.html](http://www.epa.gov/region09/cross_pr/animalwaste/index.html).

Region 9 – US / Mexico Border. California and Arizona share an international border with Mexico. Many border area residents, especially those in heavily populated urban areas, are exposed to health-threatening levels of air pollutants including ozone, particulate matter, carbon monoxide, sulfur dioxide, and air toxics. Visibility impairment exists in most of the pristine areas along the border. To address these issues, we will work with our US and Mexican partners in a bi-national effort to implement the Border 2012 Plan, which has a 10-year planning horizon to implement solutions to long-range border environmental issues. We will use local community workforces to enhance air monitoring networks and further define baseline air quality conditions. Accurate evaluation of air quality in the border area will allow both countries to successfully identify and implement measures that reduce levels of air pollutants within all common airsheds in the border region. We will target diesel retrofits and establishment of low sulfur fuel in the border region. We will also partner with the CARB to facilitate technical training for Mexican staff to build their capacity to operate and maintain air networks in Tijuana, Rosarito, Tecate, and Mexicali. We are partnering with the North American Development Bank to fund major air reductions projects in the border area, such as road paving. Reductions of emissions from mobile sources and power plants will continue to be a priority, with a pilot project addressing inspection and maintenance programs in Tijuana.

Region 10 – Smoke and Air Quality Strategy. Region 10 has developed a Smoke and Air Quality Strategy to provide a framework to identify and prioritize our work and resources on regional smoke and air quality issues related to prescribed burning for the agricultural and forestry sectors in the Pacific Northwest. The strategy also provides a way for EPA to inform the public and our partner agencies at the state, local, tribal, federal levels about our efforts. The strategy acknowledges the value of using prescribed fire as a land management tool, but has an overall vision that emissions from prescribed burning do not endanger public health or welfare. Implementation efforts under the strategy focus on prescribed burning activities that: pose a significant concern for adverse impacts to public health and welfare; have a high level of interagency, cross-sector, or cross-jurisdictional interest; or involve a responsibility, or valuable and unique role for EPA, such as our government-to-government relationship with tribes.

Region 10 – FIPs in Indian Country. Region 10 has proposed Federal Implementation Plans for 39 reservations in ID, OR, and Washington. These Plans will establish a new set of federal air quality rules to Indian reservations that will be directly implemented by EPA or by tribes under delegation agreements. After the rules are promulgated, Region 10 will begin outreach and implementation of the rules, including refocusing some of its resources so it can function as a local air authority for the 39 reservations. The Region will also be negotiating with a few tribal governments to establish agreements whereby tribes will implement some of the rules on behalf of EPA. Region 10 has also developed a tribal air monitoring strategy that will be used to guide the monitoring of air quality in Indian country, including the placement of any new monitors.

**Appendix D**  
**Office of Air and Radiation FY 2005 Commitments Table**

<b>EXPECTED COMMITMENTS TO OAR</b>	<b>National Target</b>	<b>R1</b>	<b>R2</b>	<b>R3</b>	<b>R4</b>	<b>R5</b>	<b>R6</b>	<b>R7</b>	<b>R8</b>	<b>R9</b>	<b>R10</b>
<b><u>Implement the PM2.5 NAAQS</u></b>											
Complete PM 2.5 area designations. Unit of measure = % of PM2.5 nonattainment areas designated.	100%										
Assist States in developing effective modeling protocols. Unit of measure = number of states assisted.	13										
Assist States in developing 2002 Base Year Emission Inventories. Unit of measure = number of states assisted.	8										
<b><u>Implement the 8-hour Ozone NAAQS</u></b>											
Review States milestones for Early Action Compacts. Take appropriate action on State SIPs. Unit of measure = number of final Federal Register notices published for EAC SIPs	13										
Assist States in developing effective modeling protocols. Unit of measure = number of states assisted.	20										
Assist States in developing 2002 Base Year Emission Inventories. Unit of measure = number of states assisted.	17										
<b><u>Continue to Implement the 1-hour Ozone NAAQS</u></b>											
Complete review and process Mid-course reviews for the 1-hr ozone NAAQS. Unit of measure = number of reviews completed.	7										
Publish clean data finding for areas achieving the NAAQS for 1-hour ozone. Unit of measure = number of clean data findings published.	Sum of Regions										

<b>EXPECTED COMMITMENTS TO OAR</b>	<b>National Target</b>	<b>R1</b>	<b>R2</b>	<b>R3</b>	<b>R4</b>	<b>R5</b>	<b>R6</b>	<b>R7</b>	<b>R8</b>	<b>R9</b>	<b>R10</b>
<b><u>Implement the Regional Haze Program</u></b>											
Take final action on section 309 SIPs. Unit of measure = Number of final Federal Register notices published regarding 309 SIPs	5										
<b><u>Attain and Maintain the other NAAQS</u></b>											
Take final action on CO redesignation requests. Unit of measure = number of redesignations finalized.	4										
Take final action on SO2 redesignation requests. Unit of measure = number of redesignations finalized.	4										
Take final action on PM10 redesignation requests. Unit of measure = number of redesignations finalized.	5										
<b><u>Implement the Title V and NSR Programs</u></b>											
Evaluate NSR permit program and issue report within 90 days of evaluation. Unit of measure = number of programs evaluated.	2										
Take action on citizen petitions to object to Title V permits. Unit of measure = number of draft orders transmitted to OGC.											
Take action on NSR SIP/TIP submittals, equivalency demonstrations, and delegation requests submitted in response to revisions to NSR rules, including the minor source Indian Country NSR FIP. Unit of measure = number of actions taken											
Review PSD and nonattainment NSR permits as necessary to ensure the integrity of the NSR program. Unit of measure = % of permits reviewed	100%										
Evaluate one quarter of State and local permitting programs and issue evaluation reports within 90 days. Unit of measure = number of evaluation reports issued	23										

EXPECTED COMMITMENTS TO OAR	National Target	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10
<b><u>Air Toxics - Implement Source-specific and Sector-based Standards</u></b>											
Delegate and/or ensure implementation of 100% of applicable major and area source section 112(d), 111(d), and 129 standards.	100%										
Work with States to implement MACT/BACT/GACT and/or section 112(d) standards. Unit of measure = standards implemented.											
Implement MACT/BACT/GACT and/or section 112(d) standards where applicable in Indian Country. Unit of measure = standards implemented.											
<b><u>Air Toxics - Reduce Risk</u></b>											
Work with S/L/T on community-based projects including multi-media projects through Community Action for Renewed Environment (CARE) to obtain reductions from mobile, indoor and stationary sources. Unit of measure = number of community projects funded											
Work with S/L/T to evaluate both quantitatively and qualitatively environmental results from community-based projects including multi-media projects. Unit of measure = number of community projects funded											
Maintain and enhance at a minimum 22 NATTS sites. Unit of measure = percent of data completeness	85%										
Assist states with their community monitoring projects funded by EPA. Unit of measure = number of states assisted.											
Train states and tribes on Air Toxics Program requirements. Unit of measure = number of states trained.											
Work with OTAQ to help states to implement voluntary emission control retrofit programs for existing heavy-duty diesel engines and school buses. Unit of measure = number of retrofit programs/projects.											

<b>EXPECTED COMMITMENTS TO OAR</b>	<b>National Target</b>	<b>R1</b>	<b>R2</b>	<b>R3</b>	<b>R4</b>	<b>R5</b>	<b>R6</b>	<b>R7</b>	<b>R8</b>	<b>R9</b>	<b>R10</b>
Assist tribes in carrying out monitoring activities to assess potential toxics problems, and in developing tribal air quality management programs to address local problems identified by monitoring. Unit of measure = number of tribes operating monitors.											
Issue all remaining initial Title V permits in Indian Country and those scheduled for renewal. Unit of measure = number of Title V permits issued in Indian Country. Note: National target of 41 is 22 initial and 19 renewal permits.	41 Permits										
<b><u>Indoor Environments</u></b>											
Track and report accomplishments by asthma, ETS, TfS, and radon grantees.	All Regions										
Help schools implement TfS. No regional target. Report on number of schools implementing TfS.	All Regions										
Encourage homes, schools, buildings to test for radon. No regional target. Report on number tested.	All Regions										
Encourage homes, schools, buildings to mitigate radon when found No regional target. Report on number mitigated.	All Regions										
Encourage residential radon testing as part of real estate transactions. No regional target. Report on number tested.	All Regions										
Award and oversee SIRG grants.	All Regions										
<b><u>Radiation Protection</u></b>											
Provide tech support to state programs that regulate radiation remediation.	All Regions										
Participate in radiological response exercises.	All Regions										

<b>EXPECTED COMMITMENTS TO OAR</b>	<b>National Target</b>	<b>R1</b>	<b>R2</b>	<b>R3</b>	<b>R4</b>	<b>R5</b>	<b>R6</b>	<b>R7</b>	<b>R8</b>	<b>R9</b>	<b>R10</b>
Serve as local point of contact and disseminate information on the national monitoring system.	All Regions										
<b><u>Climate Change</u></b>											
K-12 Schools: Benchmark or re-benchmark school districts. Unit of measure - number of school districts.	30										
K-12 Schools: Recruit new partners/school districts. Unit of measure - number of school districts.	30										
College or University: Benchmark or re-benchmark all residence halls on one campus. Unit of measure - number of campuses.	10										
College or University: Recruit new partners. Unit of measure = number of colleges or universities.	20										
Hospitals: Benchmark or re-benchmark small hospitals. Unit of measure - number of small hospitals.	30										
Hospitals: Recruit new partners. Unit of measure = number of small hospitals.	30										
Local Gov't: Benchmark or re-benchmark new courthouses. Unit of measure - number of new courthouses.	30										
Local Gov't: Recruit new partners. Unit of measure = number of local gov'ts.	30										
<b><u>Tribal Programs</u></b>											
Develop or implement FIPs. Unit of measure = number developed or implemented.	Sum of Regions										
Finalize FIPs applicable to reservations in Washington, Idaho, and Oregon. Unit of measure = number of FIPs.	39										
Approve CAA eligibility determinations under the Tribal Authority Rule. Unit of measure = number of eligibility determinations approved.	Sum of Regions										

<b>EXPECTED COMMITMENTS TO OAR</b>	<b>National Target</b>	<b>R1</b>	<b>R2</b>	<b>R3</b>	<b>R4</b>	<b>R5</b>	<b>R6</b>	<b>R7</b>	<b>R8</b>	<b>R9</b>	<b>R10</b>
Increase the number of tribes that are participating in regulatory management of air quality on their reservations. Unit of measure = number of tribes.	Sum of Regions										
Deliver training assistance to develop tribal expertise and abilities. Unit of measure = number of tribes assisted.	Sum of Regions										
Issue/reissue Title V permits in Indian country. Unit of measure = % of total permits issued.	National %										
Process tribal requests for redesignation to Class 1 in a timely manner.	All										